

MANUAL

TRANSMISSION

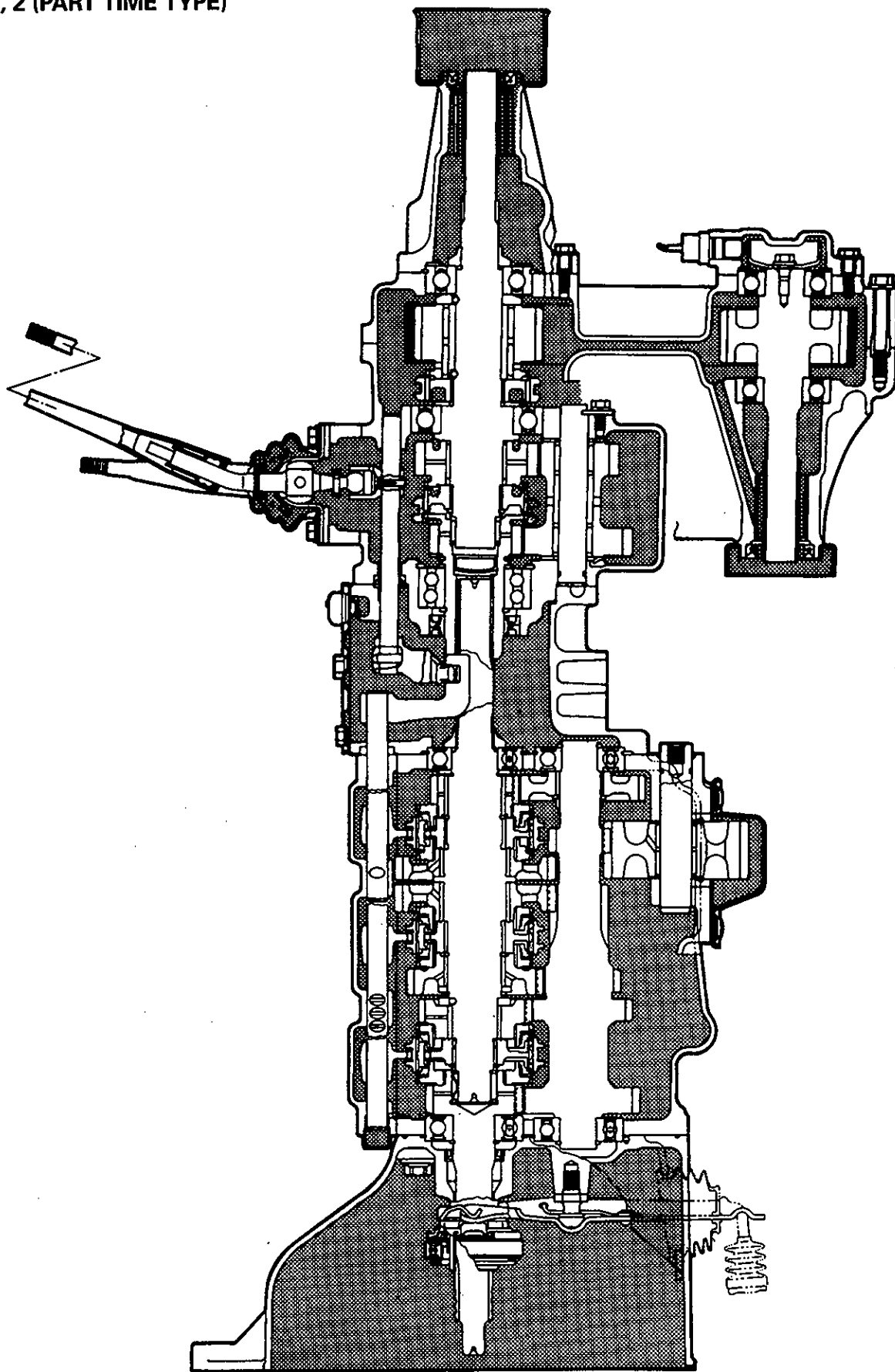
MODEL V5MT1

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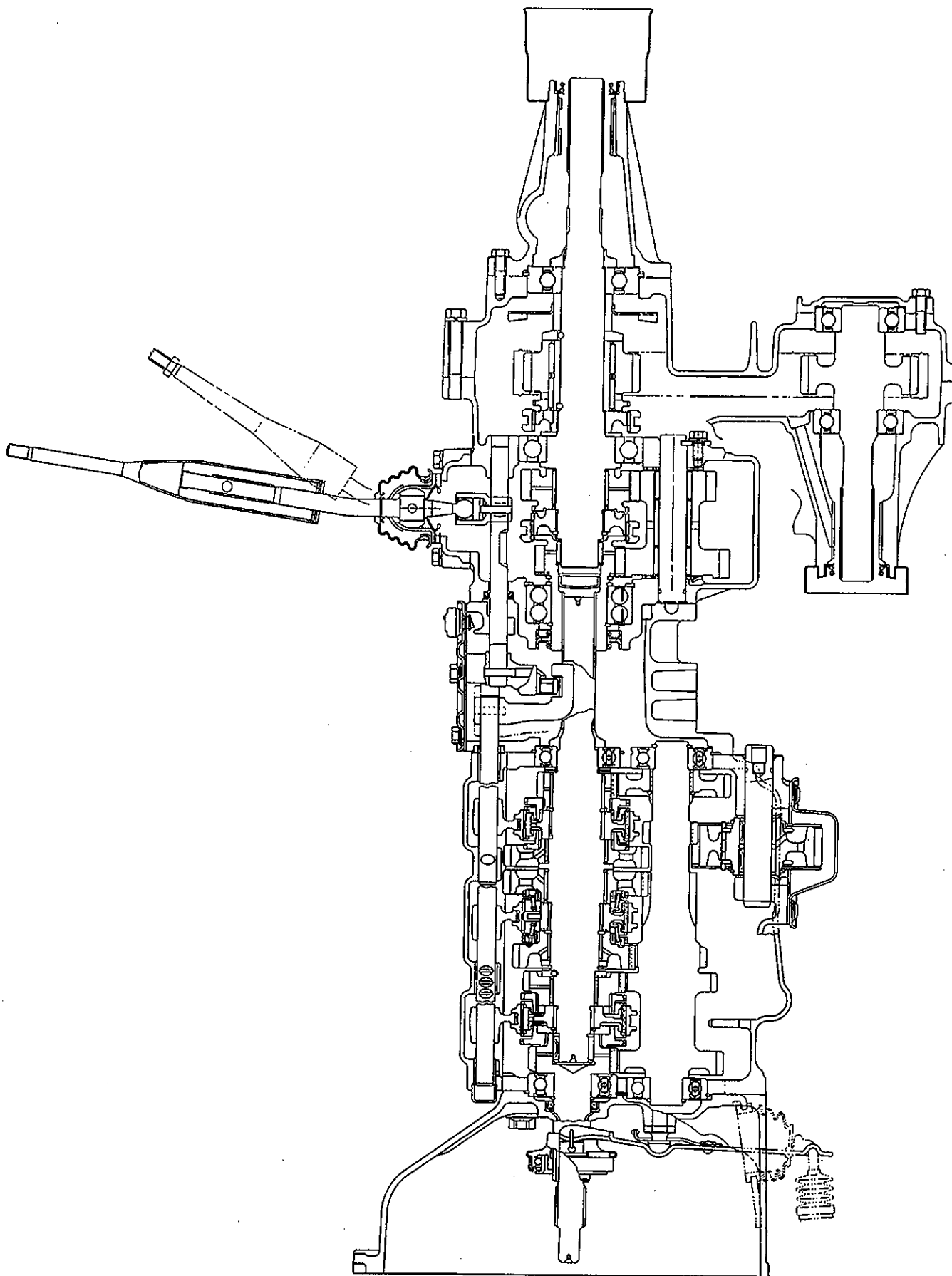
GENERAL INFORMATION

V5MT1-1, 2 (PART TIME TYPE)



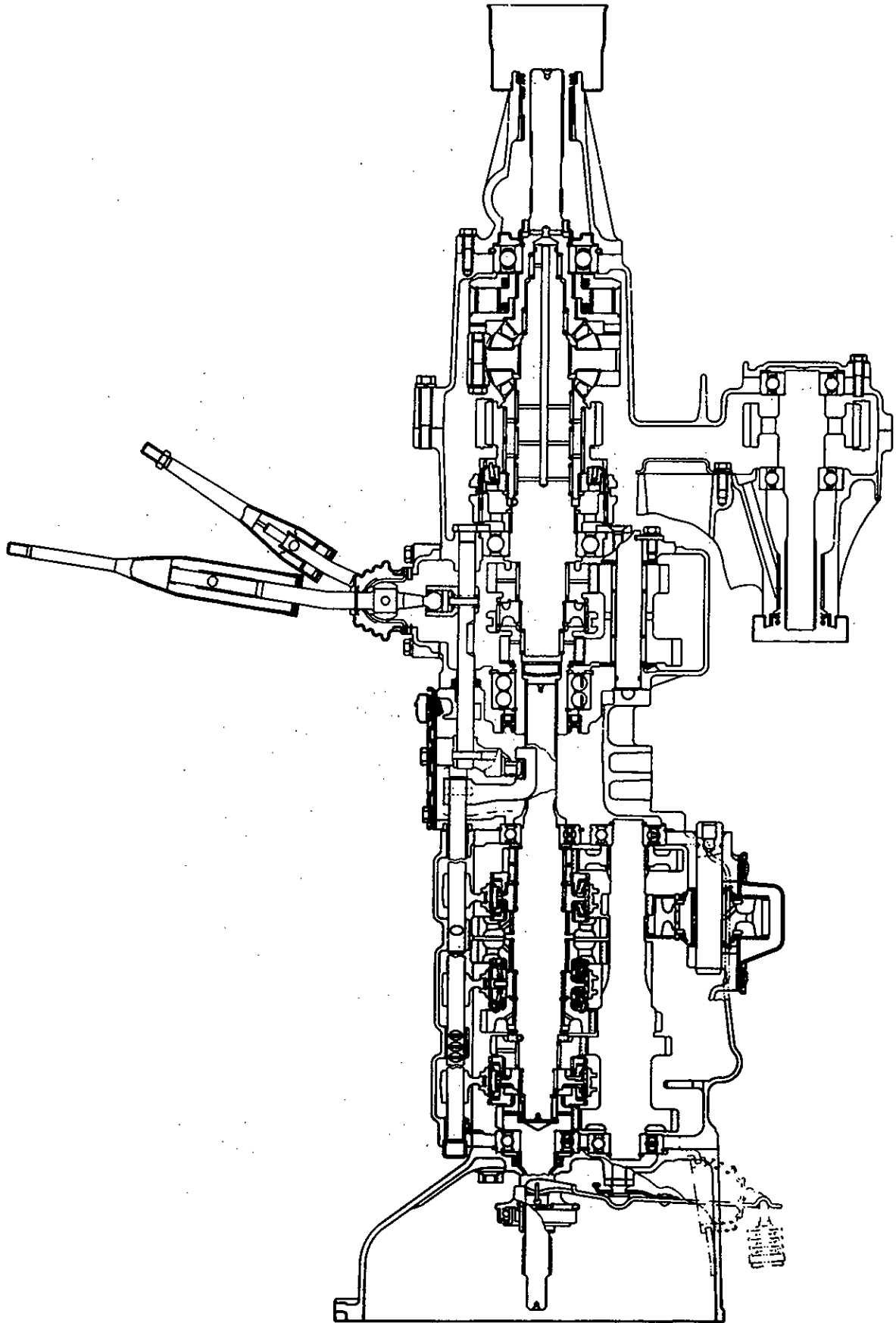
MT10006

V5MT1-3 (PART TIME TYPE)



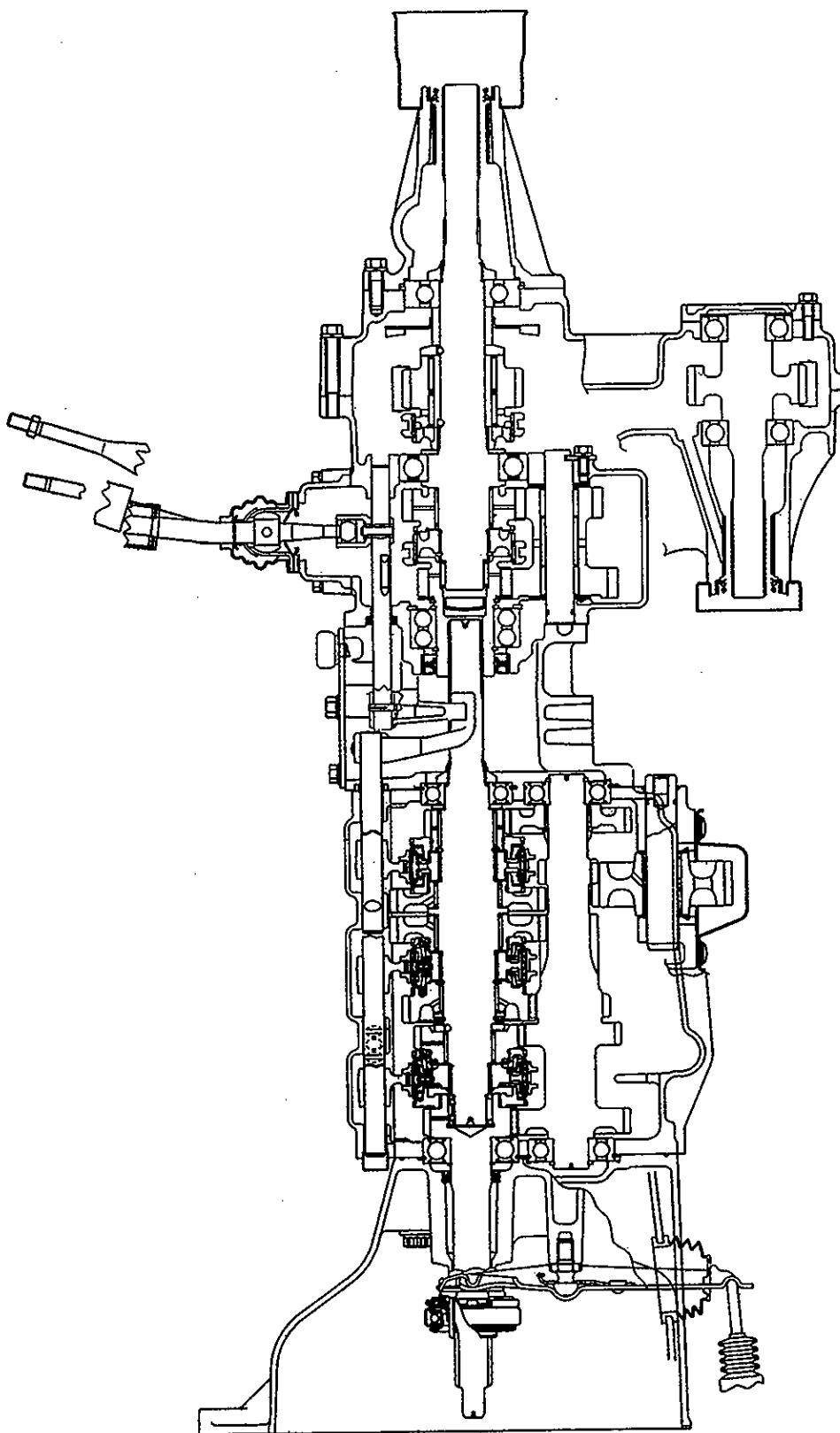
TRM0232

V5MT1-3 (SUPER SELECT TYPE)



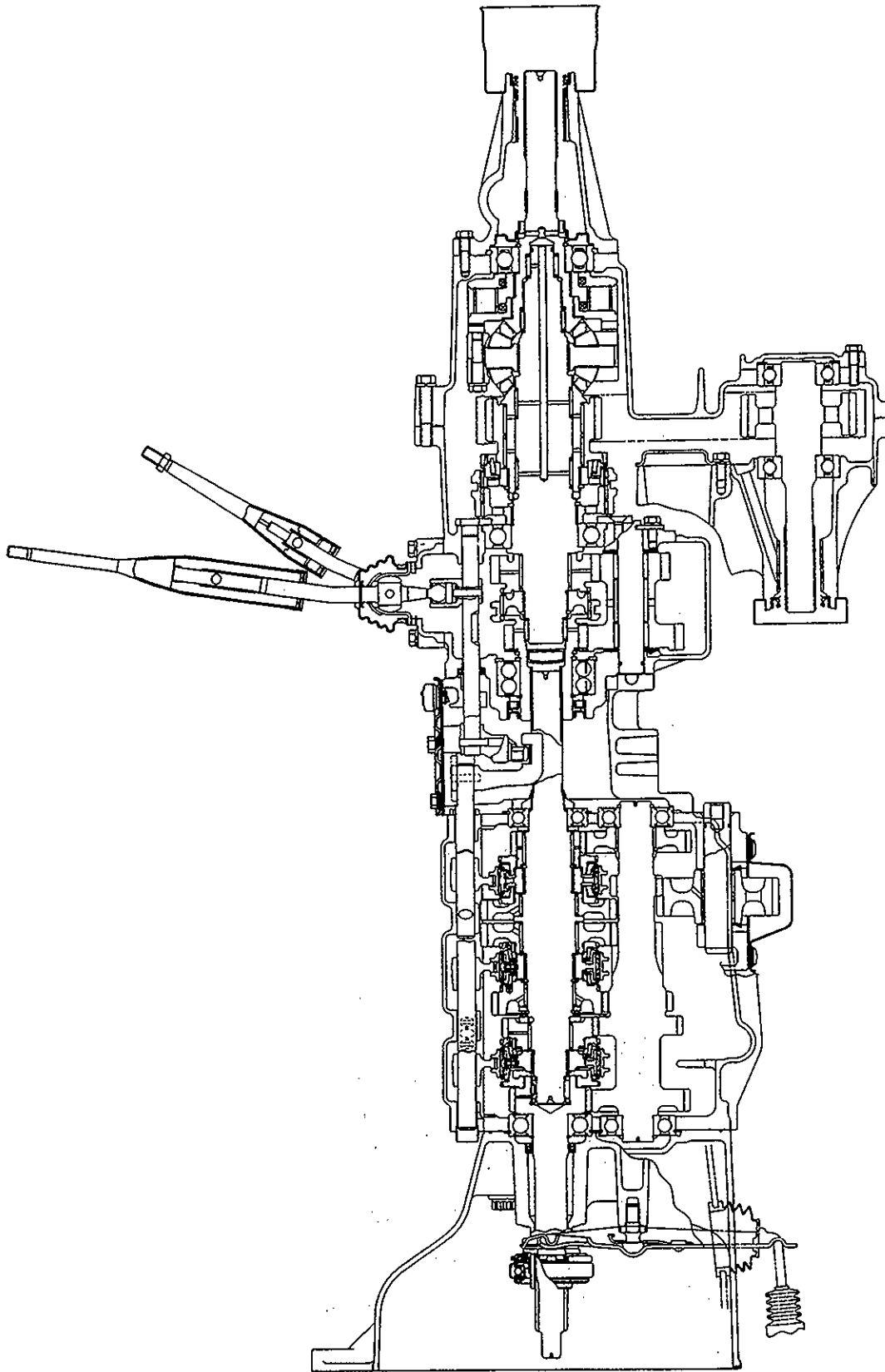
TRM0231

V5MT1-4, 6 (PART TIME TYPE)

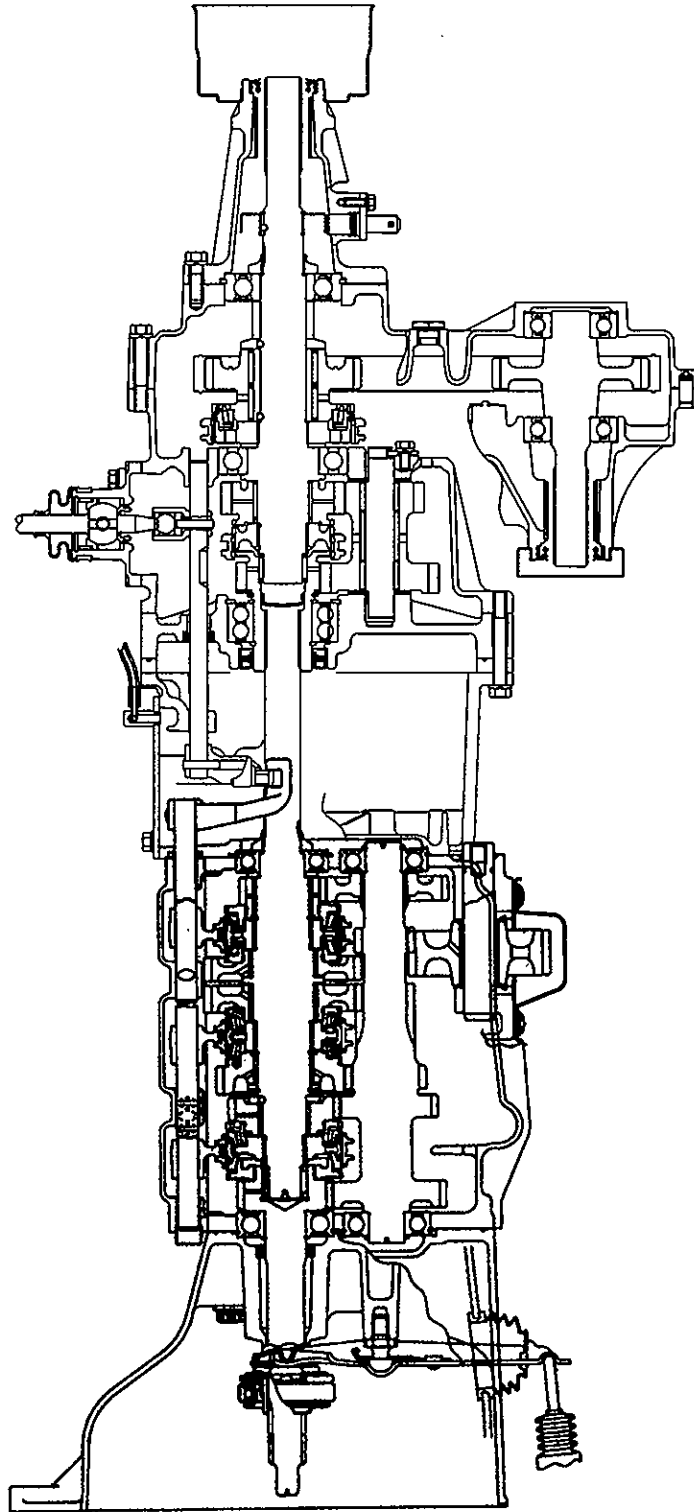


TRM0766

V5MT1-4, 6 (SUPER SELECT TYPE)



V5MT1-8 (PART TIME TYPE)



LIST OF MAJOR CHANGES

	Description of Change	Applicable Transmission Model	Effective Date
①	Reverse gear changed	All models	From Jan. 1990
②	Second gear, third gear and counter cluster gear changed	All models	From Oct. 1989
③	1st-2nd synchronizer changed	All models	From Oct. 1989
④	1st-2nd synchronizer spring changed	All models	From Jan. 1990

1. SPECIFICATIONS

TRANSMISSION MODEL TABLE – MODEL 1989

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-1-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-1-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-1-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-1-BG	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-1-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-1-ADL	24/8	PAJERO/MONTERO	6G72
	V5MT1-1-AFL	26/8	PAJERO/MONTERO	6G72
AUS	V5MT1-1-AFS	26/8	PAJERO	6G72

TRANSMISSION MODEL TABLE – MODEL 1990

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-1-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-1-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-1-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-1-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-1-BG	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-1-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-1-AFL	26/8	PAJERO/MONTERO	6G72
AUS	V5MT1-1-AFS	26/8	PAJERO	6G72
	V5MT1-1-BG	27/8	PAJERO	4D56 Intercooler turbocharger

TRANSMISSION MODEL TABLE – MODEL 1991

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-3-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BFTL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BG	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-1-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
AUS	V5MT1-3-AF	26/8	PAJERO	6G72
	V5MT1-3-BG	27/8	PAJERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO	4D56 Intercooler turbocharger

TRANSMISSION MODEL TABLE – MODEL 1992

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-3-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BFTL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BG	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-3-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-BFTL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
AUS	V5MT1-2-AF	26/8	PAJERO	6G72

TRANSMISSION MODEL TABLE – MODEL 1993

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-3-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BFTL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BG	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-3-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-3-BDT	24/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BET	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BFT	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BGT	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-3-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
AUS	V5MT1-3-AF	26/8	PAJERO, L200-4WD	6G72
	V5MT1-3-BG	27/8	PAJERO	4D56 Intercooler turbocharger
	V5MT1-3-BH	28/8	PAJERO	4D56 Intercooler turbocharger

TRANSMISSION MODEL TABLE – MODEL 1994

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-6-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BE	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BETL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
AUS	V5MT1-2-AF	26/8	L200-4WD	6G72
	V5MT1-6-AG	27/8	PAJERO	6G72
	V5MT1-6-AE	25/8	PAJERO	6G72

TRANSMISSION MODEL TABLE – MODEL 1995

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-6-AFA	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFAL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BE	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BEL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BETL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-6-ADTL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AETL	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFTL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AGTL	27/8	PAJERO/MONTERO	6G72
	V5MT1-6-BDT	24/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BEL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFT	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-PDA	24/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-PFA	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
AUS	V5MT1-2-AF	26/8	L200-4WD	6G72
	V5MT1-6-AE	25/8	PAJERO	6G72
	V5MT1-6-AF	26/8	PAJERO	6G72

TRANSMISSION MODEL TABLE – MODEL 1996

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-6-AEAL	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFA	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFAL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BE	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BEL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BETL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFTL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BHL	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-6-ADTL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFTL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BDT	24/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
AUS	V5MT1-2-AF	26/8	L200-4WD	6G72
	V5MT1-6-AE	25/8	PAJERO	6G72
	V5MT1-6-AF	26/8	PAJERO	6G72

TRANSMISSION MODEL TABLE – MODEL 1997

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EC	V5MT1-4-BE	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-6-ADAL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEA	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEAL	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-BEM	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BEML	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BENL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFM	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFML	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-4-BE	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-6-BDT	24/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFT	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-ADTL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEM	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AF	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFTL	26/8	PAJERO/MONTERO	6G72
MMAL	V5MT1-4-AF	26/8	L200-4WD	6G72
	V5MT1-4-AG	27/8	L200-4WD	6G72
	V5MT1-6-AE	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AET	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AF	26/8	PAJERO/MONTERO	6G72

TRANSMISSION MODEL TABLE – MODEL 1998

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EUR	V5MT1-4-BE	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-6-ADAL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEA	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEAL	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-BEM	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BEML	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BENL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFM	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFML	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-6-ADTL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AE	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFA	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFAL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFTL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BDT	24/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFT	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
MMAL	V5MT1-4-AF	26/8	L200-4WD	6G72
	V5MT1-4-AG	27/8	L200-4WD	6G72
	V5MT1-4-AEG	25/8	CHALLENGER	6G72

TRANSMISSION MODEL TABLE – MODEL 1999

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EUR	V5MT1-4-AEG	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-4-AEGL	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-4-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-4-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-4-BE	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-6-ADAL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEA	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEAL	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFA	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BEM	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BEML	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BENL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFM	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFML	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-6-ADTL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AE	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFA	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFAL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFTL	26/8	PAJERO/MONTERO	6G72
	V5MT1-4-BE	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
MMAL	V5MT1-4-AEG	25/8	CHALLENGER	6G72
	V5MT1-4-AF	26/8	L200-4WD	6G72
	V5MT1-4-AG	27/8	L200-4WD	6G72

TRANSMISSION MODEL TABLE – MODEL 2000

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EUR	V5MT1-B-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-B-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-B-AEGL	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-B-AEG	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-4-BEGL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-6-ADAL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEA	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AEAL	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFA	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BEM	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BEML	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BENL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFM	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFML	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFNL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BGTL	27/8	PAJERO/MONTERO	4D56 Intercooler turbocharger

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EXP	V5MT1-B-AEGL	25/8	NATIVA	6G72
	V5MT1-B-AEG	25/8	NATIVA	6G72
	V5MT1-4-BEL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BE	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-6-AFAL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFTL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-ADTL	24/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFL	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-AE	25/8	PAJERO/MONTERO	6G72
	V5MT1-6-AFA	26/8	PAJERO/MONTERO	6G72
	V5MT1-6-BEL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BFL	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BH	28/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-BF	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
MMAL	V5MT1-4-AEG	25/8	CHALLENGER	6G72
	V5MT1-4-AG	27/8	L200-4WD	6G72
	V5MT1-4-AF	26/8	L200-4WD	6G72

TRANSMISSION MODEL TABLE – MODEL 2001

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EUR	V5MT1-4-BEGL	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-B-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-B-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-B-AEGL	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-B-AEG	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-8-BFGL	–	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-4-BEL	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BE	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-B-AEGL	25/8	NATIVA	6G72
	V5MT1-B-AEG	25/8	NATIVA	6G72
	V5MT1-8-AEG	–	PAJERO/MONTERO	6G72
	V5MT1-8-AEGL	–	PAJERO/MONTERO	6G72
MMAL	V5MT1-4-AG	27/8	L200–4WD	6G72
	V5MT1-4-AF	26/8	L200–4WD	6G72
	V5MT1-4-AEG	25/8	CHALLENGER	6G72

TRANSMISSION MODEL TABLE – MODEL 2002

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EUR	V5MT1-4-BEG	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG4	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG5	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEGL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-D-AEG	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-D-AEGL	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-B-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-B-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-D-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-D-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-6-DENL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-6-DETL	25/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-8-BFGS	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-4-BE	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-D-AEG	25/8	NATIVA	6G72
	V5MT1-D-AEGL	25/8	NATIVA	6G72
	V5MT1-6-AFAL	26/8	PAJERO/MONTERO	6G72
	V5MT1-9-AEG	25/8	PAJERO/MONTERO	6G72
	V5MT1-9-AEGL	25/8	PAJERO/MONTERO	6G72
MMAL	V5MT1-C-AF	26/8	L200-4WD	6G72
	V5MT1-C-AG	27/8	L200-4WD	6G72
	V5MT1-D-AEG	25/8	CHALLENGER	6G72

TRANSMISSION MODEL TABLE – MODEL 2003

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EUR	V5MT1-4-BEG	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG4	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG5	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEGL	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-B-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-B-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-D-AEG	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-D-AEGL	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-D-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-D-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-8-BFGS	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
EXP	V5MT1-4-BE	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEGL	25/8	L200–4WD	4D56 Intercooler turbocharger
	V5MT1-D-AEGL	25/8	NATIVA	6G72
	V5MT1-9-AEG	25/8	PAJERO/MONTERO	6G72
	V5MT1-9-AEGL	25/8	PAJERO/MONTERO	6G72
MMAL	V5MT1-C-AF	26/8	L200–4WD	6G72
	V5MT1-C-AG	27/8	L200–4WD	6G72
	V5MT1-D-AEG	25/8	CHALLENGER	6G72

TRANSMISSION MODEL TABLE – MODEL 2004

	Transmission model	Speedometer gear ratio	Vehicle model	Engine model
EUR	V5MT1-8-BFGS	26/8	PAJERO/MONTERO	4D56 Intercooler turbocharger
	V5MT1-4-BEG4	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG5	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEGL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-B-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-B-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-D-AEG	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-D-AEGL	25/8	PAJERO SPORT/ MONTERO SPORT	6G72
	V5MT1-D-BFG	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
	V5MT1-D-BFGL	26/8	PAJERO SPORT/ MONTERO SPORT	4D56 Intercooler turbocharger
EXP	V5MT1-4-BE	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEG	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-4-BEGL	25/8	L200-4WD	4D56 Intercooler turbocharger
	V5MT1-B-BFGL	26/8	NATIVA	4D56 Intercooler turbocharger
	V5MT1-D-AEGL	25/8	NATIVA	6G72
MMAL	V5MT1-C-AF	26/8	L200-4WD	6G72
	V5MT1-C-AG	27/8	L200-4WD	6G72
	V5MT1-D-AEG	25/8	CHALLENGER	6G72

GENERAL SPECIFICATIONS

Items	Specifications
Transmission	
Gear ratio	
1st	3.918
2nd	2.261
3rd	1.395
4th	1.000
5th	0.829
Reverse	3.925
Transfer	
Gear ratio	
High	1.000
Low	1.925

SERVICE SPECIFICATIONS

	Standard	Limit
Transmission		
Clearance between synchronizer ring back surface and gear (single cone type)		0.2 (0.008)
Clearance between outer synchronizer ring back surface and gear (double cone type)		0.3 (0.012)
Transfer		
Input gear bearing end play	0 – 0.06 (0 – 0.0024)	
Input gear end play	0 – 0.06 (0 – 0.0024)	
H-L clutch hub end play	0 – 0.08 (0 – 0.0031)	
Rear output shaft end play	0 – 0.1 (0 – 0.004)	
Front output shaft end play	2 (0.079) or less	
Center differential end play (SUPER SELECT TYPE)	0.02 – 0.1 (0.0008 – 0.004)	
Differential lock hub end play (SUPER SELECT TYPE)	0 – 0.08 (0 – 0.0031)	
2-4WD synchronizer hub end play (SUPER SELECT TYPE)	0 – 0.08 (0 – 0.0031)	
Rear output shaft bearing end play (SUPER SELECT TYPE)	0 – 0.08 (0 – 0.0031)	
Clearance between outer synchronizer ring back surface and drive sprocket (SUPER SELECT TYPE)		0.3 (0.012)

ADJUSTMENT SNAP RINGS AND SPACERS

Part name	Thickness mm (in.)	Identification symbol	Part No.
Transfer			
Snap ring (For adjustment of input gear bearing)	2.30 (0.0906)	–	MD704199
	2.35 (0.0925)	Red	MD704200
	2.40 (0.0945)	White	MD704201
	2.45 (0.0965)	Blue	MD704202
	2.50 (0.0984)	Green	MD704203
Snap ring (For adjustment of input gear assembly)	2.70 (0.1063)	Purple	MD704204
	2.75 (0.1083)	Pink	MD704205
	2.80 (0.1102)	Yellow	MD704206
	2.85 (0.1122)	White	MD704207
	2.90 (0.1142)	Blue	MD704208
Snap ring (For adjustment of H-L clutch hub)	2.14 (0.0843)	–	MD704212
	2.21 (0.0870)	Yellow	MD704213
	2.28 (0.0898)	White	MD704214
	2.35 (0.0925)	Blue	MD704215
	2.42 (0.0953)	Red	MD704216
Spacer (For adjustment of rear output shaft)	0.84 (0.0331)	84	MD734326
	0.93 (0.0366)	93	MD734327
	1.02 (0.0402)	02	MD734328
	1.11 (0.0437)	11	MD734329
	1.20 (0.0472)	20	MD734330
	1.29 (0.0508)	29	MD734331
	1.38 (0.0543)	38	MD734332
	1.47 (0.0579)	47	MD734333
	1.56 (0.0614)	56	MD734334
	1.65 (0.0650)	65	MD734335
	1.74 (0.0685)	74	MD734336
	1.83 (0.0720)	83	MD734337
	1.92 (0.0756)	92	MD734338
	2.01 (0.0791)	01	MD734339
Snap ring SUPER SELECT TYPE	2.26 (0.0890)	–	MD734311
(For adjustment of rear output shaft end play)	2.33 (0.0917)	Red	MD734312
	2.40 (0.0945)	White	MD734313
	2.47 (0.0972)	Blue	MD734314
Snap ring SUPER SELECT TYPE	2.56 (0.1008)	–	MD738393
(For adjustment of 2-4WD synchronizer hub end play)	2.63 (0.1035)	Red	MD738394
	2.70 (0.1063)	White	MD738395
	2.77 (0.1091)	Blue	MD738396
	2.84 (0.1118)	Yellow	MD738397

Part name	Thickness mm (in.)	Identification symbol	Part No.
Snap ring	2.56 (0.1008)	—	MD738386
SUPER SELECT TYPE	2.63 (0.1035)	Red	MD738387
(For adjustment of differential lock hub end play)	2.70 (0.1063)	White	MD738388
	2.77 (0.1091)	Blue	MD738389
	2.84 (0.1118)	Yellow	MD738390
	2.91 (0.1146)	Green	MD738391
	2.98 (0.1173)	Purple	MD738392
Spacer	1.30 (0.0512)	30	MD734315
SUPER SELECT TYPE	1.38 (0.0543)	38	MD734316
(For adjustment of center differential end play)	1.46 (0.0575)	46	MD734317
	1.54 (0.0606)	54	MD734318
	1.62 (0.0638)	62	MD734319
	1.70 (0.0669)	70	MD734320
	1.78 (0.0701)	78	MD734321
	1.86 (0.0732)	86	MD734322
	1.94 (0.0764)	94	MD734323
	2.02 (0.0795)	02	MD734324
	2.10 (0.0827)	10	MD734325

TORQUE SPECIFICATIONS

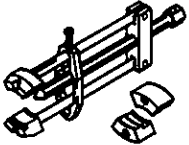
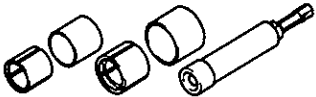
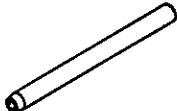
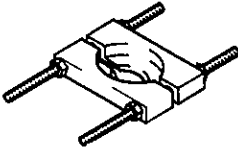
Item	Torque		
	Nm	kgm	ft.lbs.
Transmission			
Clutch housing mounting bolts	119	11.9	86
Transfer case adapter to transmission case mounting bolts	41	4.1	30
Transfer case adapter to transfer case mounting bolts	36	3.6	26
Gear shift case bolts	24	2.4	17
Power take-off cover bolts	19	1.9	14
Adapter cover bolts	24	2.4	17
Mainshaft locking nut	260	26	188
Reverse shaft lock piece bolt	41	4.1	30
Clutch release fork fulcrum	58	5.8	42
Backup lamp switch	35	3.5	25
Gear shift case poppet plugs	40	4	29
Neutral return plunger plugs	36	3.6	26
Poppet plug on transfer case adapter	48	4.8	35

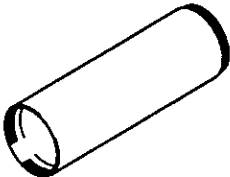
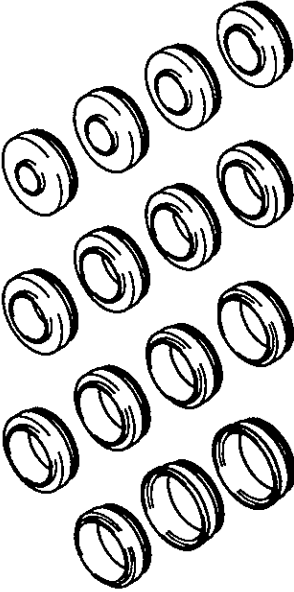
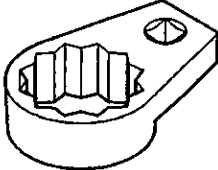
Item	Torque		
	Nm	kgm	ft.lbs.
Transfer			
Pulse rotor bolt (V5MT1-1, 2)	19	1.9	14
Pulse generator bolt (V5MT1-1, 2)	12	1.2	9.0
Transfer case plate bolt (V5MT1-8)	36	3.6	26
Chain cover bolt	36	3.6	26
Side cover bolt (V5MT1-1, 2, 3, 4, 6, B, D)	9.0	0.9	6.6
Rear cover bolt (V5MT1-1, 2, 3, 4, 6, B, D)	19	1.9	14
Rear cover bolt (V5MT1-8)	36	3.6	26
Cover bolt (V5MT1-1, 2, 3, 4, 6, B, D)	19	1.9	14
Select plunger plug (V5MT1-1, 2)	33	3.3	24
Lock plate bolt	19	1.9	14
Rear output shaft lock nut	115	11.5	83
Speedometer sleeve clamp bolt (V5MT1-1, 2, 3, 4, 6, B, D)	19	1.9	14
Vehicle speed sensor bolt (V5MT1-8)	11	1.1	8
Seal plug (V5MT1-3, 4, 6, 8, B, D)	36	3.6	26
4WD indicator light switch (V5MT1-1, 2)	30	3	22
4WD switch and transfer switch (V5MT1-8)	35	3.5	25
Detection switch (V5MT1-3, V5MT1-4, V5MT1-6)	36	3.6	26
Poppet plug	36	3.6	26
H-L shift rail plug (V5MT1-3, 4, 6, 8, B, D)	33	3.3	24
Plunger boss bolt (V5MT1-3, 4, 6, 8, B, D)	33	3.3	24
Oil dam cover	19	1.9	14
(SUPER SELECT TYPE)			
Bearing retainer	19	1.9	14
(SUPER SELECT TYPE)			
Center differential case bolt	65	6.5	47
(SUPER SELECT TYPE)			
Dynamic damper bolt	36	3.6	26
Under guard bolt <EXP>	36	3.6	26
Control Lever Assembly (V5MT1-1, 2, 3, 4, 6)			
Control lever bolt	19	1.9	14
Stopper bracket nut	19	1.9	14

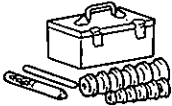
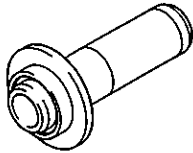
Items	Specified sealants, adhesives and grease
Transmission	
Adapter gasket (V5MT1-1, 2, 3, 4, 6, B, D)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Air breather (V5MT1-1, 2, 3, 4, 6, B, D)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Clutch housing gasket	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Clutch housing oil seal	Multipurpose grease SAE J310, NLGI No. 2
Neutral return plunger (A), (B)	Multipurpose grease SAE J310, NLGI No. 2
Gear shift case	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Transfer case adapter	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Gear shift case screw plug	3M ATD Part No.8660 or equivalent
Adapter mounting bolt	3M STUD Locking No.4170 or equivalent
Adapter cover (V5MT1-4, 6, 8, B, D)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Spacer (V5MT1-8-BFGL)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Transfer	
Chain cover gasket (V5MT1-1, 2)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Cover gasket (V5MT1-1, 2)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Cover mounting bolt (V5MT1-1, 2, 3, 4, 6, B, D)	3M STUD Locking No. 4170 or equivalent
Rear cover gasket (V5MT1-1, 2)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Chain cover (V5MT1-3, 4, 6, 8, B, D)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Poppet plug	3M ATD Part No. 8660 or equivalent
Plug.....	3M ATD Part No. 8660 or equivalent
Return spring plug (V5MT1-3, 4, 6, 8, B, D)	3M Super Weatherstrip No. 8001 or equivalent
Cover (V5MT1-3, 4, 6, B, D)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Rear cover (V5MT1-3, 4, 6, 8, B, D)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Transfer plate (V5MT1-8)	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Bearing retainer screw.....	3M STUD Locking No.4170 or equivalent
Control lever	
Control housing cover gasket	Mitsubishi genuine sealant Part No. MD997740 or equivalent
Special bolt Threaded part	3M Scotch Grip No. 2353 or equivalent
Seat	3M ATD Part No. 8660 or equivalent
Stopper plate gasket	Mitsubishi genuine sealant Part No. MD997740 or equivalent

NOTES

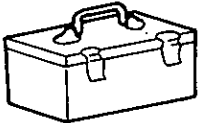
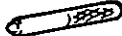
2. SPECIAL TOOLS

Tool	Number	Name	Use
	MD998019	Lock pin extractor	Driving out of the spring pin.
	MD998020	Bearing puller	Removal of bearing
	MD998192	Bearing puller	Installation of transfer drive shaft bearing
	MD998245	Lock pin installer	Driving in of the spring pin
	MD998801	Bearing puller	Removal and installation of transfer bearing and clutch hub
	MD998809	Lock nut wrench (41)	Removal and installation of mainshaft lock nut
	MD998811	Bearing puller adapter	Use with MD998020

Tool	Number	Name	Use
	MD998812	Installer cap	Installation of the bearing
	MD998813	Installer-100	Installation of the bearing
	MD998814	Installer-200	Installation of the bearing
	MD998815 MD998816 MD998817 MD998818 MD998819 MD998820 MD998821 MD998822 MD998823 MD998824 MD998825 MD998826 MD998827 MD998829 MD998830	Installer adapter	Installation of the bearing
	MD998835	Lock nut wrench (46)	Removal and installation of rear output shaft lock nut

Tool	Number	Name	Use
	MB990925	Bearing and oil seal installer set	Installation of oil seal
	MH061407	Oil seal installer	Installation of clutch housing oil seal

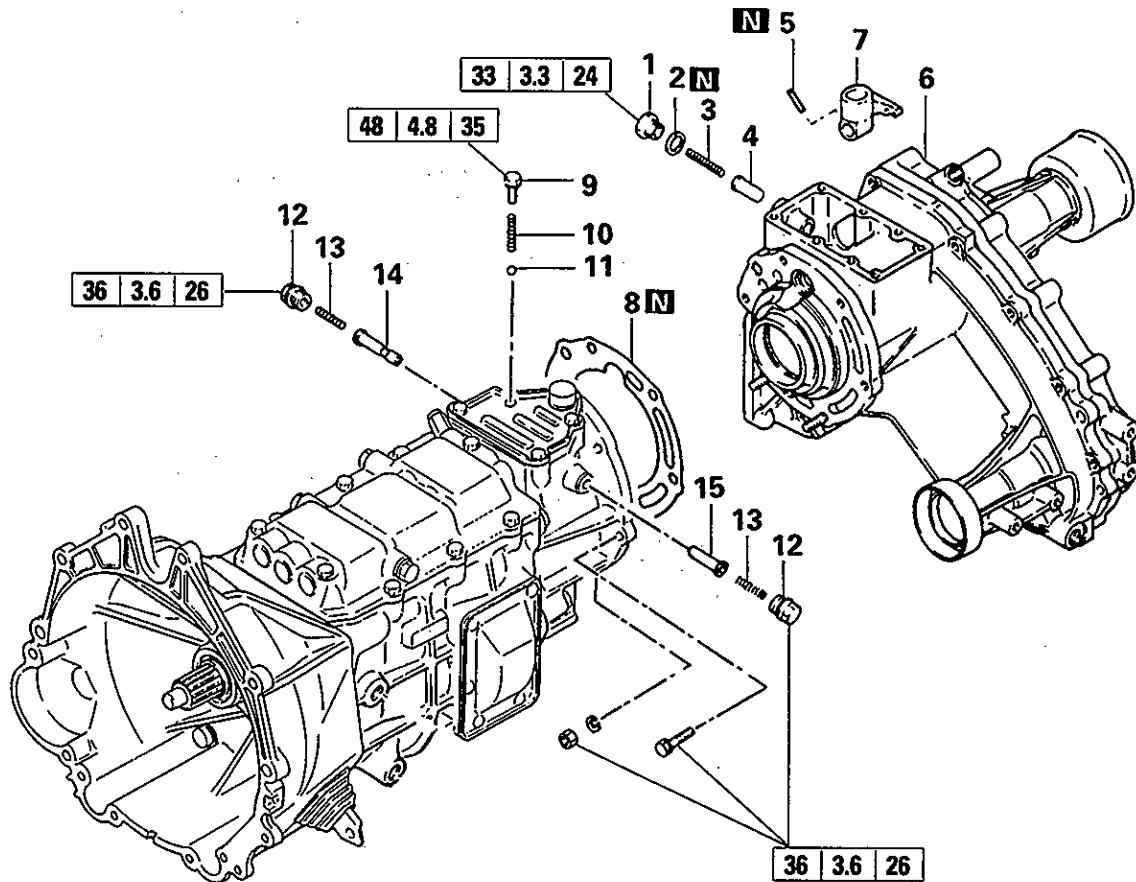
CONTENTS OF BEARING AND OIL SEAL INSTALLER SET MB990925

Set	Contents			
	Tool	Name	Tool No.	Diameter mm (in.)
Bearing and oil seal installer set MB990925 		Installer adapter	MB990926	39 (1.535)
			MB990927	45 (1.772)
			MB990928	49.5 (1.949)
			MB990929	51 (2.008)
			MB990930	54 (2.126)
			MB990931	57 (2.244)
			MB990932	61 (2.402)
			MB990933	63.5 (2.500)
			MB990934	67.5 (2.657)
			MB990935	71.5 (2.815)
			MB990936	75.5 (2.972)
			MB990937	79 (3.110)
		Installer bar	MB990938	–
		Brass bar	MB990939	–

NOTES

3. TRANSMISSION

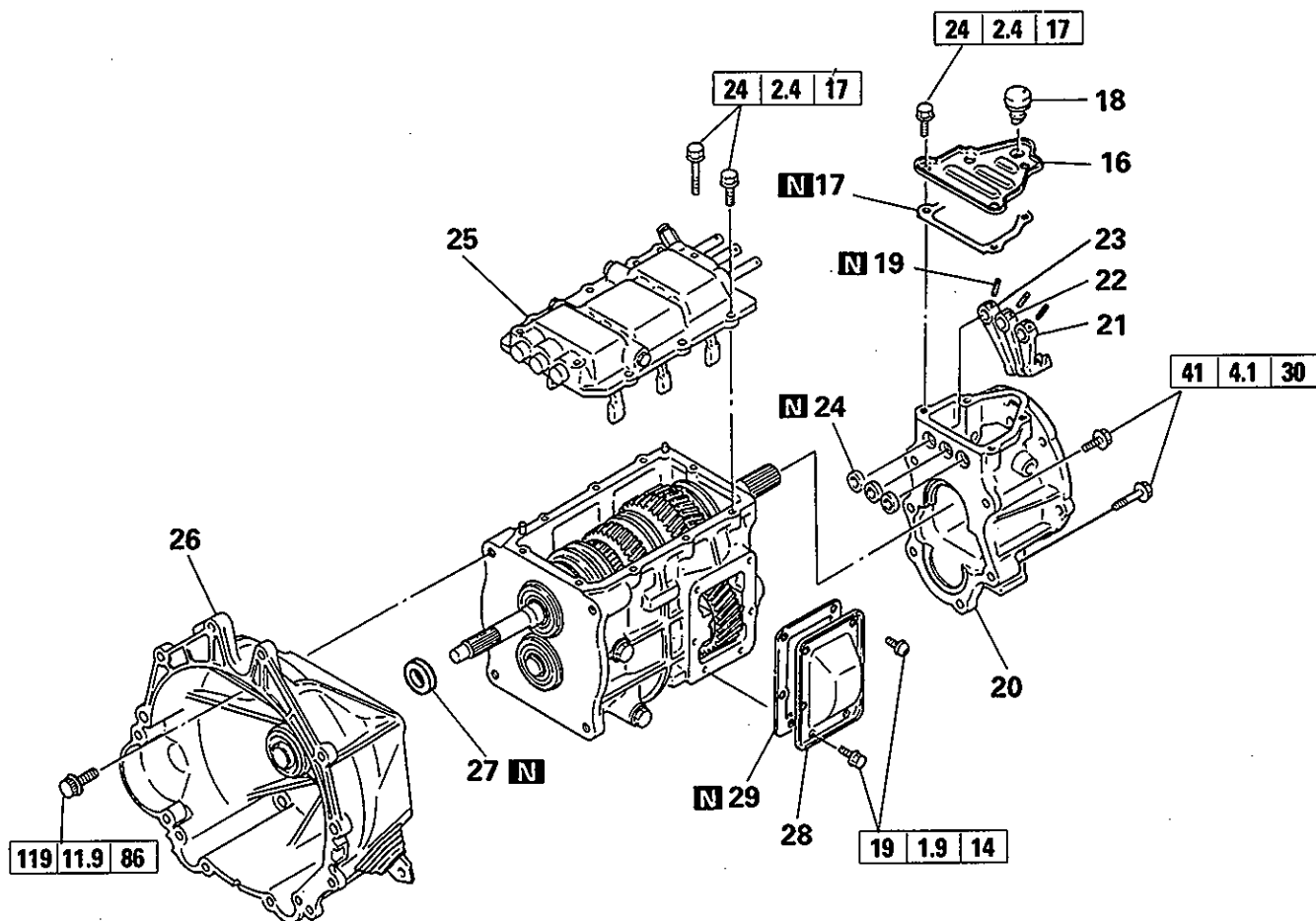
V5MT1-1, 2, 3



Disassembly steps

- | | | |
|---------|--------------------------------|-------------------|
| | 1. Select plunger plug | } V5MT1-1, 2 only |
| | 2. Gasket | |
| | 3. Select spring | |
| | 4. Select plunger | |
| (A) (P) | 5. Spring pin | |
| | 6. Transfer assembly | |
| | 7. Change shifter | |
| (Q) | 8. Adapter gasket | |
| | 9. Plug | |
| | 10. Spring | |
| | 11. Steel ball | |
| | 12. Seal plug | |
| | 13. Neutral return spring | |
| (S) | 14. Neutral return plunger (B) | |
| (S) | 15. Neutral return plunger (A) | |

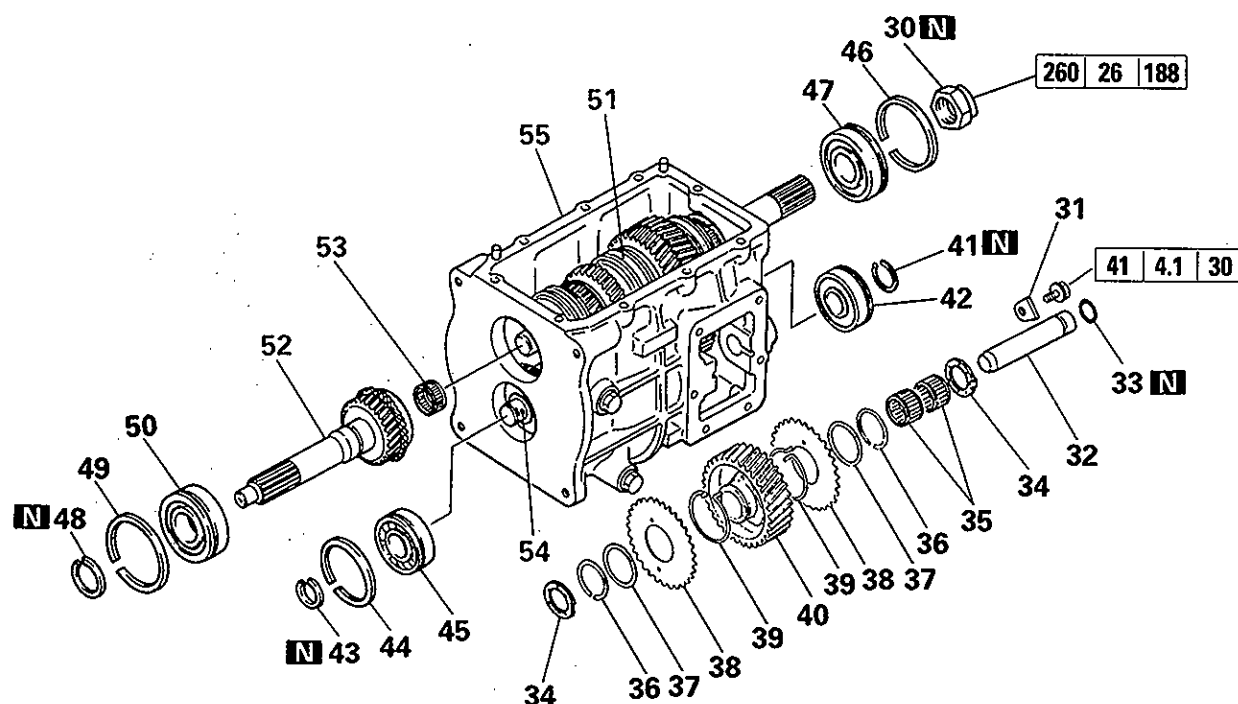
V5MT1-1, 2, 3



Disassembly steps

- 16. Adapter cover
- 17. Adapter cover gasket
- (N)** 18. Air breather
- (B)** **(M)** 19. Spring pin
- (L)** 20. Transfer case adapter
- (L)** 21. 1st-2nd gear shift jaw
- (L)** 22. 3rd-4th gear shift jaw
- (L)** 23. 5th-reverse gear shift jaw
- (K)** 24. Seal ring
- (J)** 25. Gear shift case
- (I)** 26. Clutch housing
- 27. Oil seal
- 28. Power take off cover
- 29. Power take off cover gasket

V5MT1-1, 2, 3



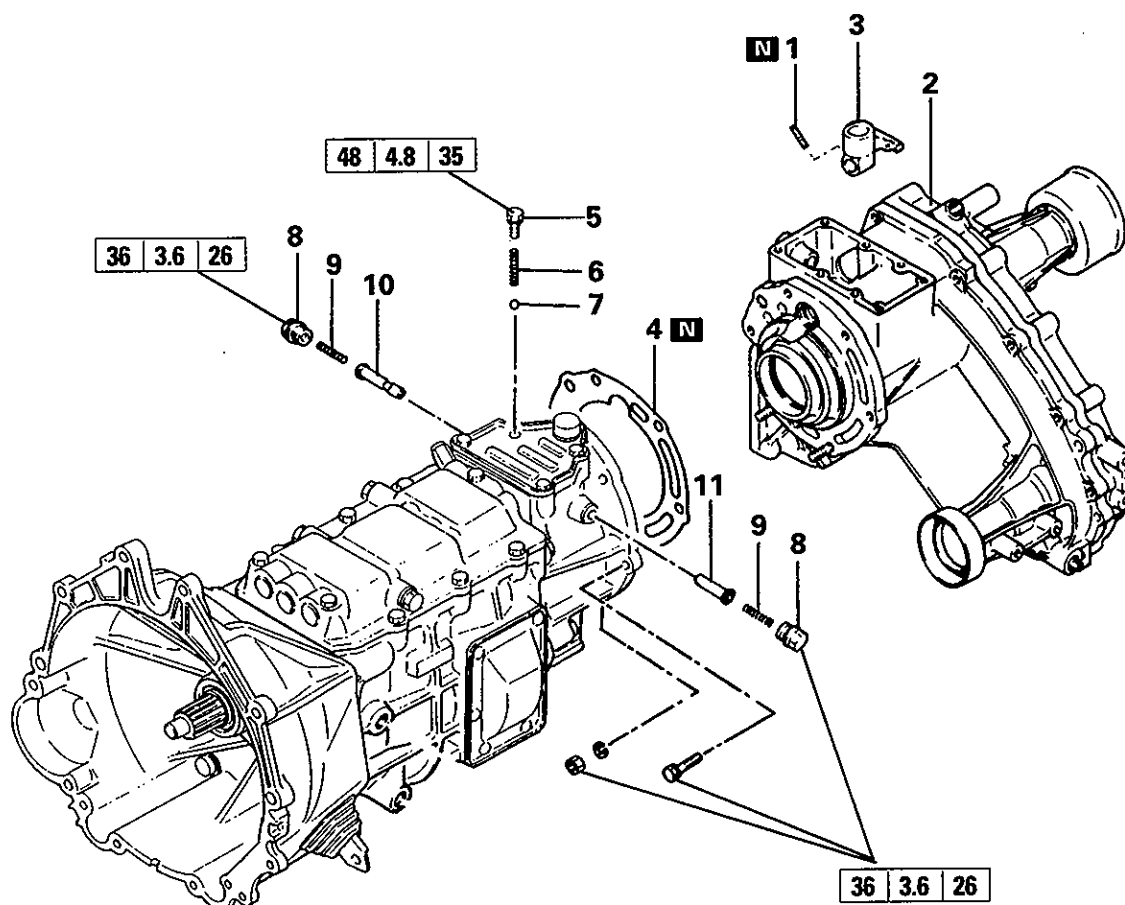
Disassembly steps

- © 30. Lock nut
 - 31. Lock piece
 - ① 32. Reverse shaft
 - 33. O-ring
 - 34. Side washer
 - 35. Needle bearing
 - 36. Snap ring
 - 37. Spacer
 - 38. Sub gear
 - 39. Spring
 - 40. Reverse gear
 - 41. Snap ring
 - ② 42. Ball bearing
 - 43. Snap ring
 - 44. Snap ring
 - ③ 45. Ball bearing
 - ④ 46. Snap ring
 - ⑤ 47. Ball bearing
 - 48. Snap ring
 - 49. Snap ring
 - ⑥ 50. Ball bearing
 - ⑦ 51. Main shaft assembly
 - ⑧ 52. Drive pinion
 - 53. Pilot bearing
 - ⑨ 54. Counter shaft
 - 55. Transmission case
- V5MT1-3-B only

Reassembly steps

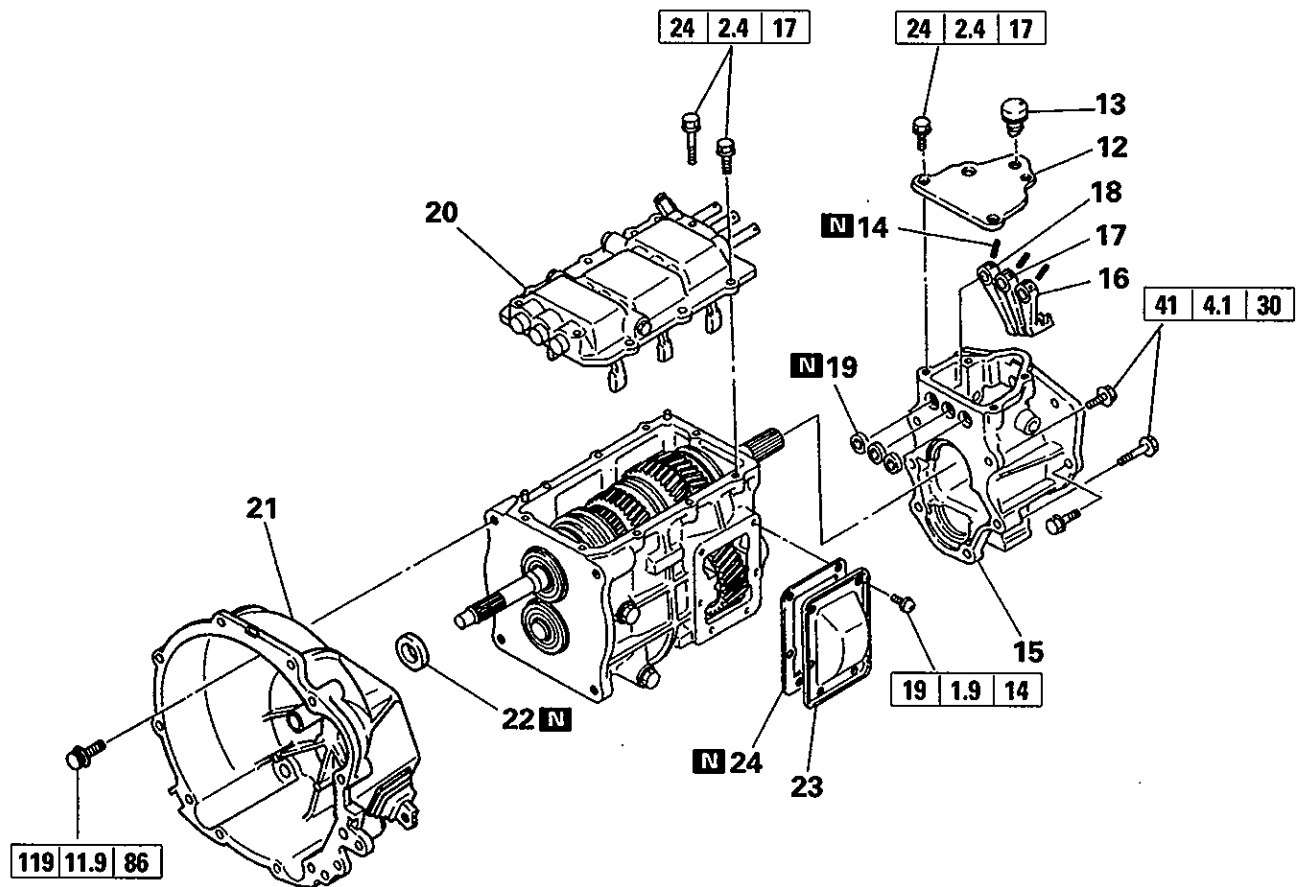
- 55. Transmission case
 - ① 54. Counter shaft assembly
 - ② 50. Ball bearing
 - 48. Snap ring
 - ③ 52. Drive pinion
 - 49. Snap ring
 - ④ 53. Pilot bearing
 - ⑤ 51. Main shaft assembly
 - 46. Snap ring
 - ⑥ 47. Ball bearing
 - 44. Snap ring
 - ⑦ 45. Ball bearing
 - 43. Snap ring
 - ⑧ 42. Ball bearing
 - 41. Snap ring
 - ⑨ 40. Reverse gear
 - 39. Spring
 - ⑩ 38. Sub gear
 - 37. Spacer
 - 36. Snap ring
 - 35. Needle bearing
 - ⑪ 34. Side washer
 - 33. O-ring
 - 32. Reverse shaft
 - 31. Lock piece
 - ⑫ 30. Lock nut
- V5MT1-3-B only

V5MT1-4, 6, B

**Disassembly steps**

- ① ① 1. Spring pin
- 2. Transfer assembly
- 3. Change shifter
- ④ 4. Adapter gasket
- 5. Plug
- 6. Spring
- 7. Steel ball
- 8. Seal plug
- 9. Neutral return spring
- ⑤ ⑤ 10. Neutral return plunger (B)
- ⑤ ⑤ 11. Neutral return plunger (A)

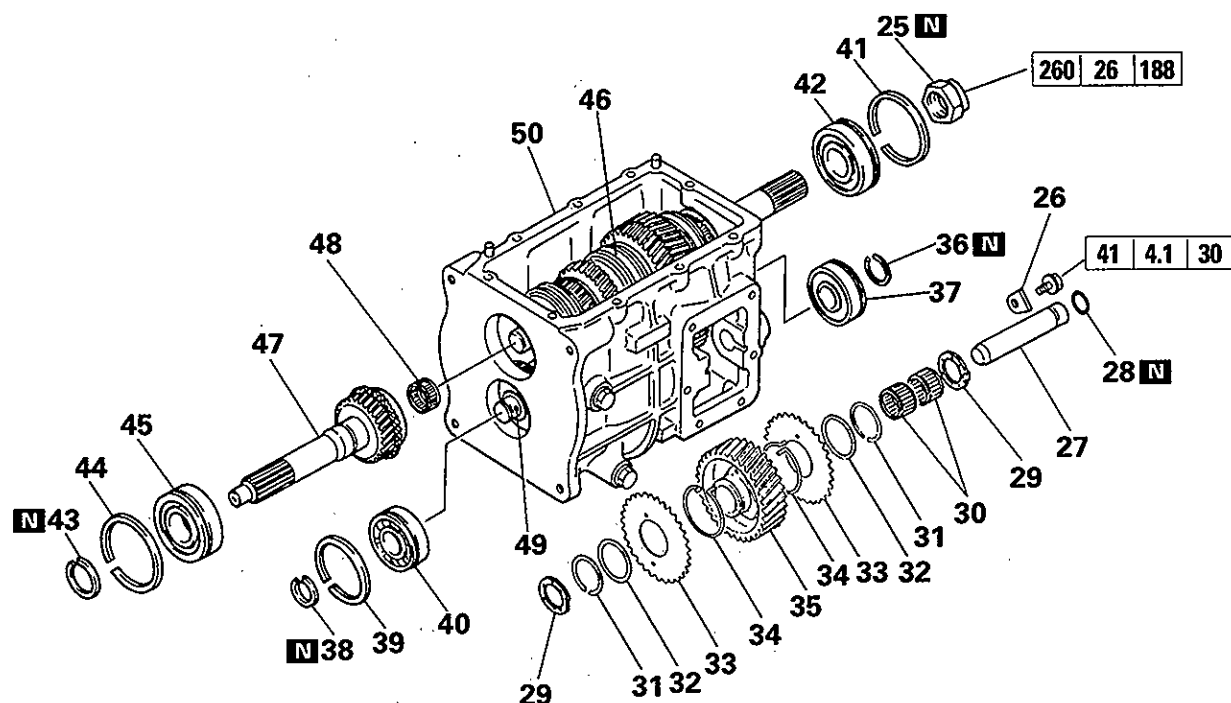
V5MT1-4, 6, B



Disassembly steps

- 12. Adapter cover
- 13. Air breather
- 14. Spring pin
- 15. Transfer case adapter
- 16. 1st-2nd gear shift jaw
- 17. 3rd-4th gear shift jaw
- 18. 5th-reverse gear shift jaw
- 19. Seal ring
- 20. Gear shift case
- 21. Clutch housing
- 22. Oil seal
- 23. Power take off cover
- 24. Power take off cover gasket

V5MT1-4, 6, B

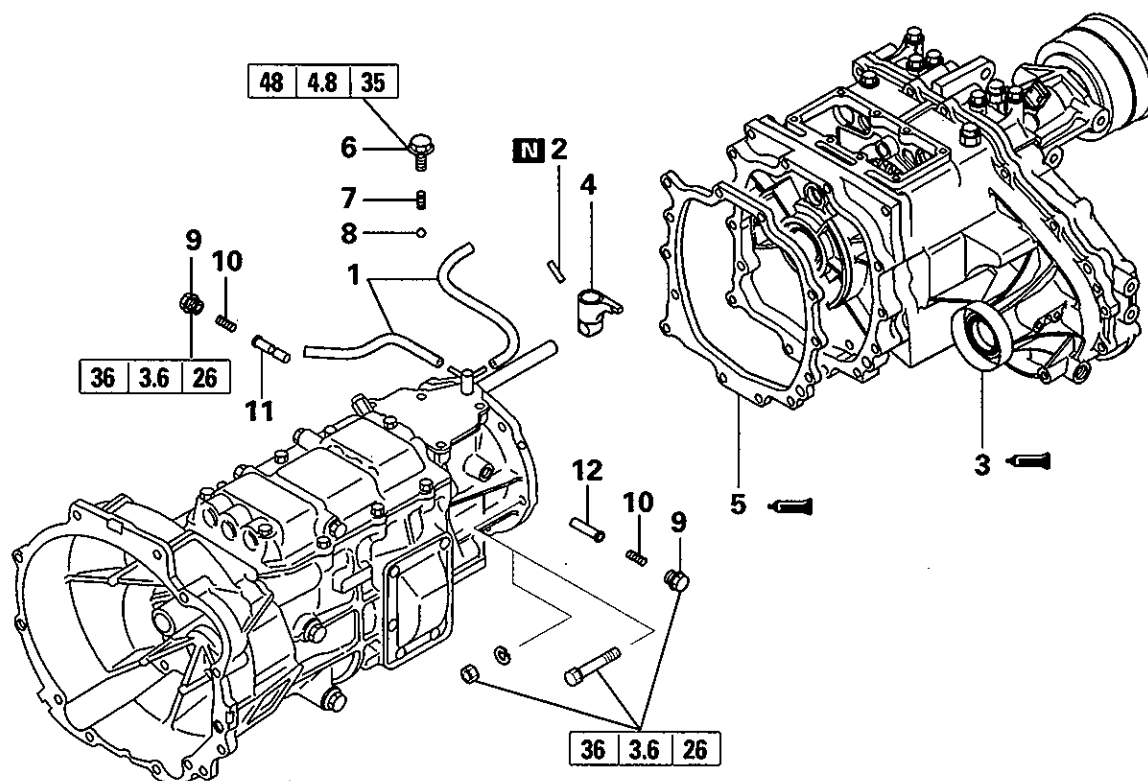


Disassembly steps

- © 25. Lock nut
 - 26. Lock piece
 - Ⓓ 27. Reverse shaft
 - 28. O-ring
 - 29. Side washer
 - 30. Needle bearing
 - 31. Snap ring
 - 32. Spacer
 - 33. Sub gear
 - 34. Spring
 - 35. Reverse gear
 - 36. Snap ring
 - Ⓔ 37. Ball bearing
 - 38. Snap ring
 - 39. Snap ring
 - Ⓔ 40. Ball bearing
 - 41. Snap ring
 - Ⓕ 42. Ball bearing
 - 43. Snap ring
 - 44. Snap ring
 - Ⓕ 45. Ball bearing
 - Ⓖ 46. Main shaft assembly
 - Ⓖ 47. Drive pinion
 - 48. Pilot bearing
 - Ⓕ 49. Counter shaft
 - 50. Transmission case
- V5MT1-6-B only

Reassembly steps

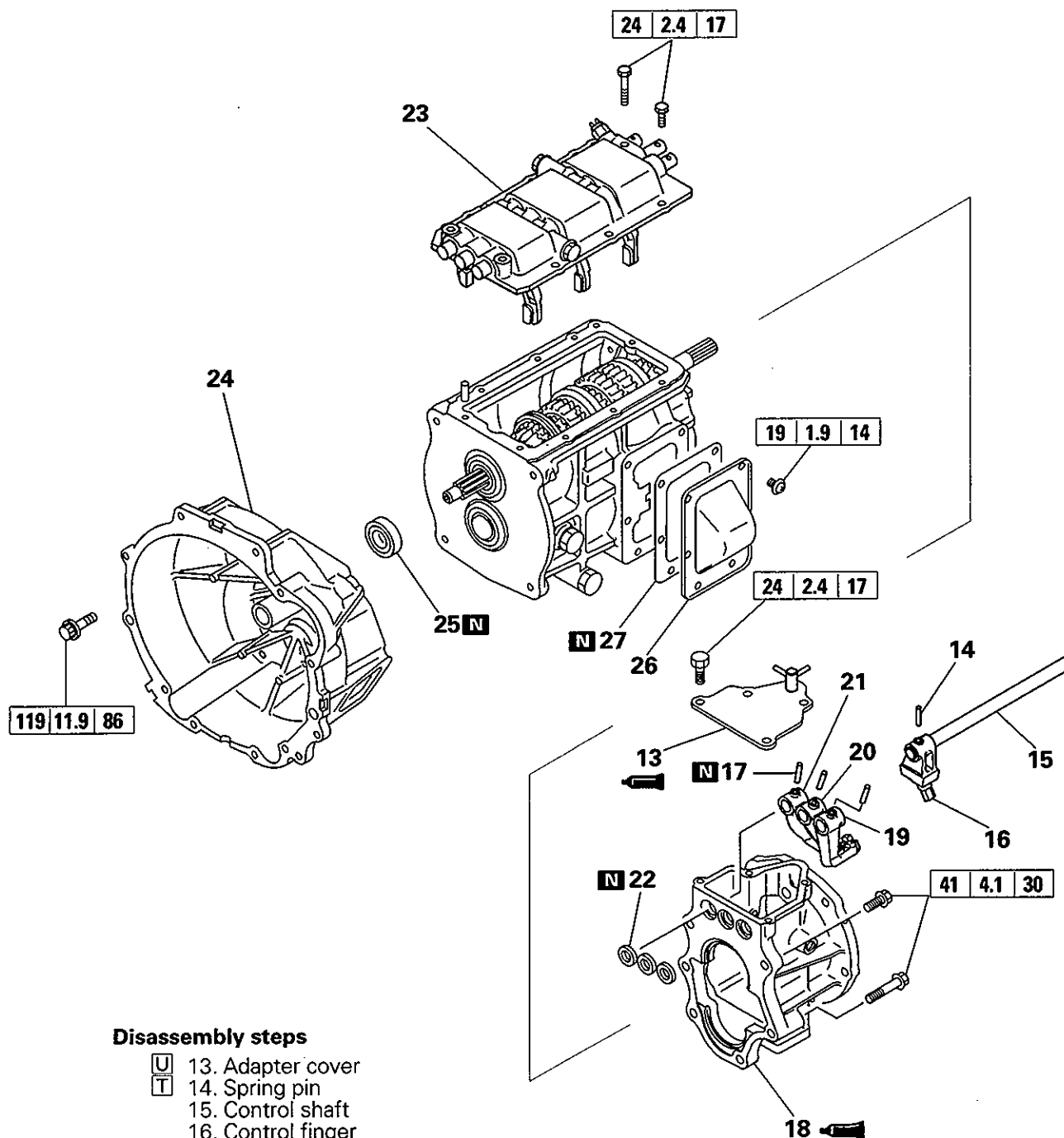
- 50. Transmission case
 - Ⓐ 49. Counter shaft assembly
 - Ⓑ 45. Ball bearing
 - 43. Snap ring
 - Ⓒ 47. Drive pinion
 - 44. Snap ring
 - Ⓒ 48. Pilot bearing
 - Ⓒ 46. Main shaft assembly
 - 41. Snap ring
 - Ⓓ 42. Ball bearing
 - 39. Snap ring
 - Ⓔ 40. Ball bearing
 - 38. Snap ring
 - Ⓕ 37. Ball bearing
 - 36. Snap ring
 - Ⓖ 35. Reverse gear
 - 34. Spring
 - Ⓖ 33. Sub gear
 - 32. Spacer
 - 31. Snap ring
 - 30. Needle bearing
 - Ⓖ 29. Side washer
 - 28. O-ring
 - 27. Reverse shaft
 - 26. Lock piece
 - Ⓕ 25. Lock nut
- V5MT1-6-B only



Disassembly steps

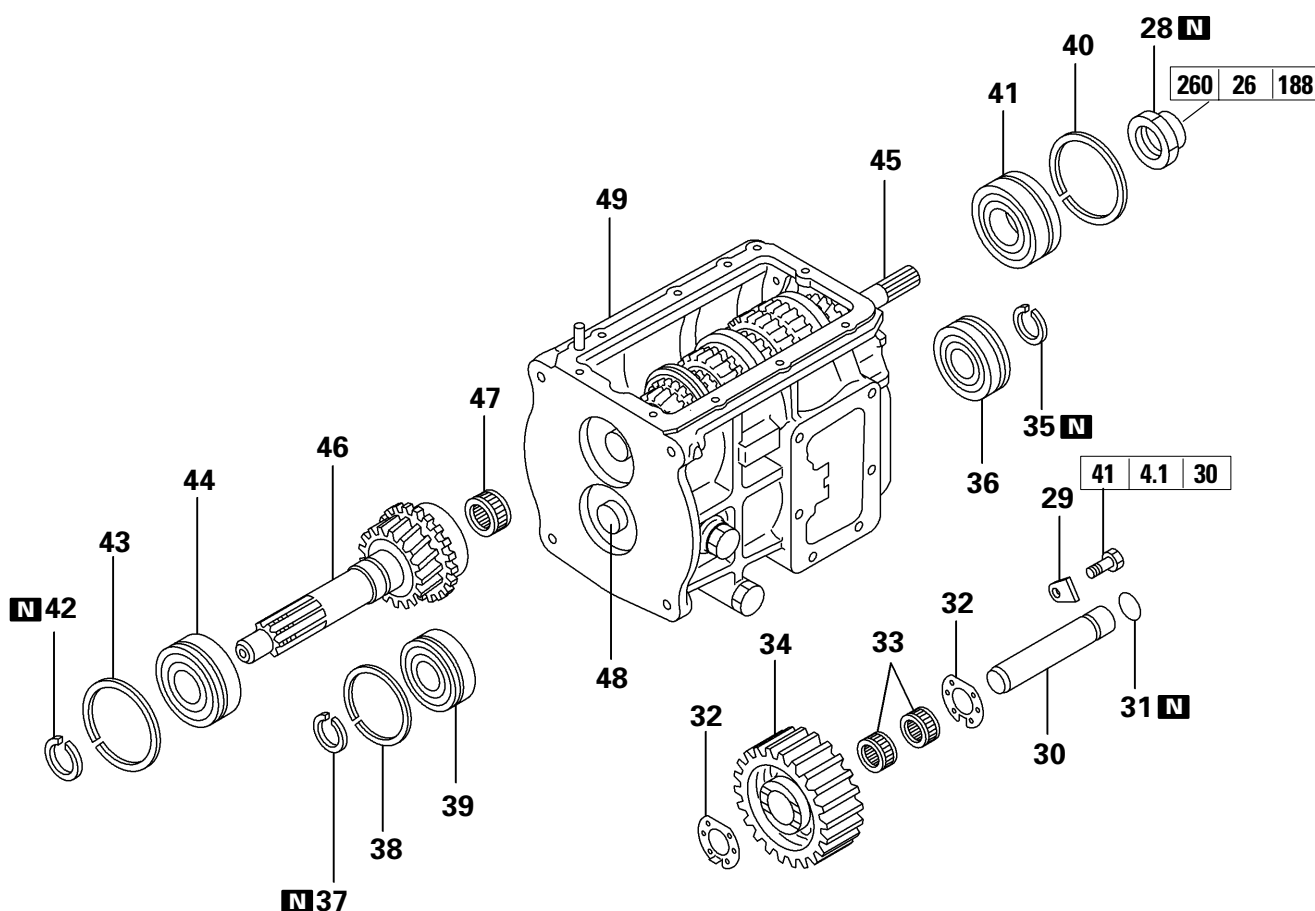
- ① 1. Vacuum hose
- ② 2. Spring pin
- ③ 3. Transfer assembly
- ④ 4. Change shifter
- ⑤ 5. Spacer <V5MT1-8-BFGL>
- ⑥ 6. Plug
- ⑦ 7. Spring
- ⑧ 8. Steel ball
- ⑨ 9. Seal plug
- ⑩ 10. Neutral return spring
- ⑪ 11. Neutral return plunger (B)
- ⑫ 12. Neutral return plunger (A)

V5MT1-8



Disassembly steps

- U** 13. Adapter cover
- T** 14. Spring pin
- 15. Control shaft
- 16. Control finger
- B** **M** 17. Spring pin
- L** 18. Transfer case adapter
- L** 19. 1st-2nd gear shift jaw
- L** 20. 3rd-4th gear shift jaw
- L** 21. 5th-reverse gear shift jaw
- L** 22. Seal ring
- K** 23. Gear shift case
- J** 24. Clutch housing
- I** 25. Oil seal
- 26. Power take off cover
- 27. Power take off cover gasket



TRM1580

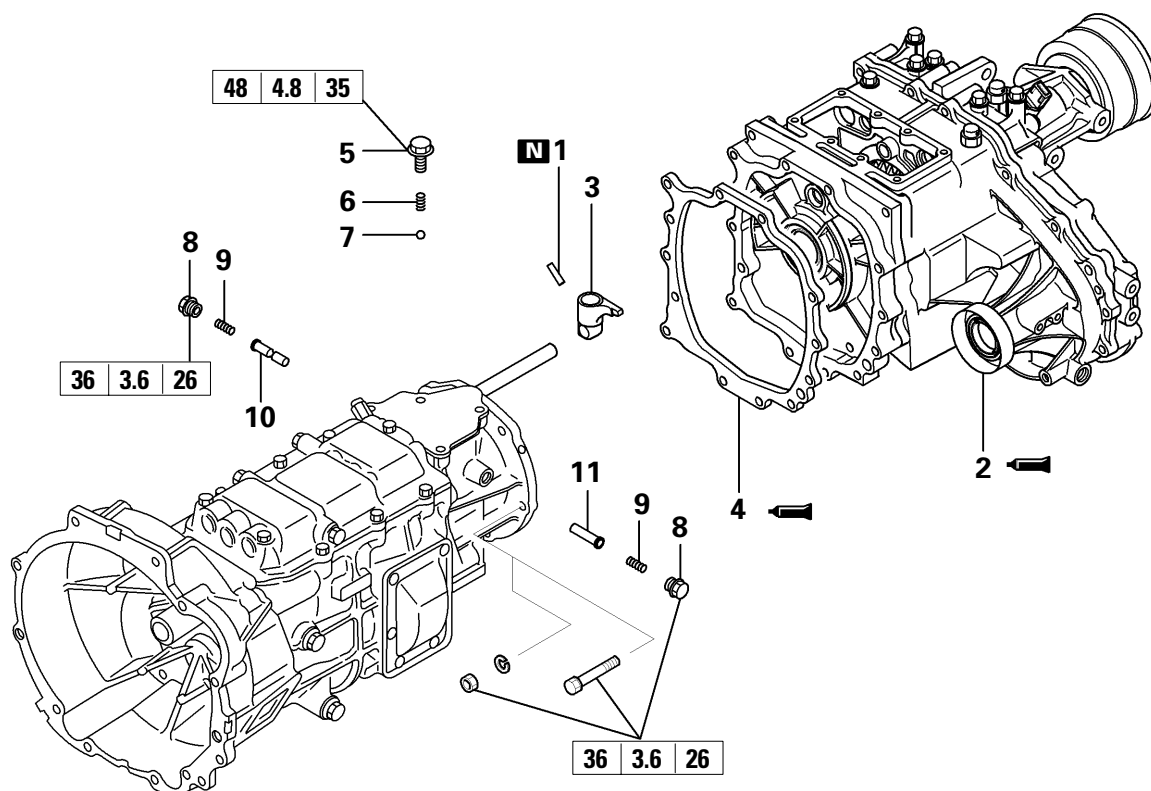
Disassembly steps

- © 28. Lock nut
- 29. Lock piece
- Ⓓ 30. Reverse shaft
- 31. O-ring
- 32. Side washer
- 33. Needle bearing
- 34. Reverse gear
- 35. Snap ring
- Ⓔ 36. Ball bearing
- 37. Snap ring
- 38. Snap ring
- Ⓔ 39. Ball bearing
- 40. Snap ring
- Ⓕ 41. Ball bearing
- 42. Snap ring
- 43. Snap ring
- Ⓖ 44. Ball bearing
- Ⓖ 45. Main shaft assembly
- Ⓖ 46. Drive pinion
- 47. Pilot bearing
- Ⓕ 48. Counter shaft assembly
- 49. Transmission case

Reassembly steps

- 49. Transmission case
- Ⓐ 48. Counter shaft assembly
- Ⓑ 44. Ball bearing
- 42. Snap ring
- Ⓒ 46. Drive pinion
- 43. Snap ring
- Ⓒ 47. Pilot bearing
- Ⓒ 45. Main shaft assembly
- 40. Snap ring
- Ⓓ 41. Ball bearing
- 38. Snap ring
- Ⓔ 39. Ball bearing
- 37. Snap ring
- Ⓕ 36. Ball bearing
- 35. Snap ring
- Ⓖ 34. Reverse gear
- Ⓖ 33. Needle bearing
- Ⓖ 32. Side washer
- 31. O-ring
- 30. Reverse shaft
- 29. Lock piece
- Ⓕ 28. Lock nut

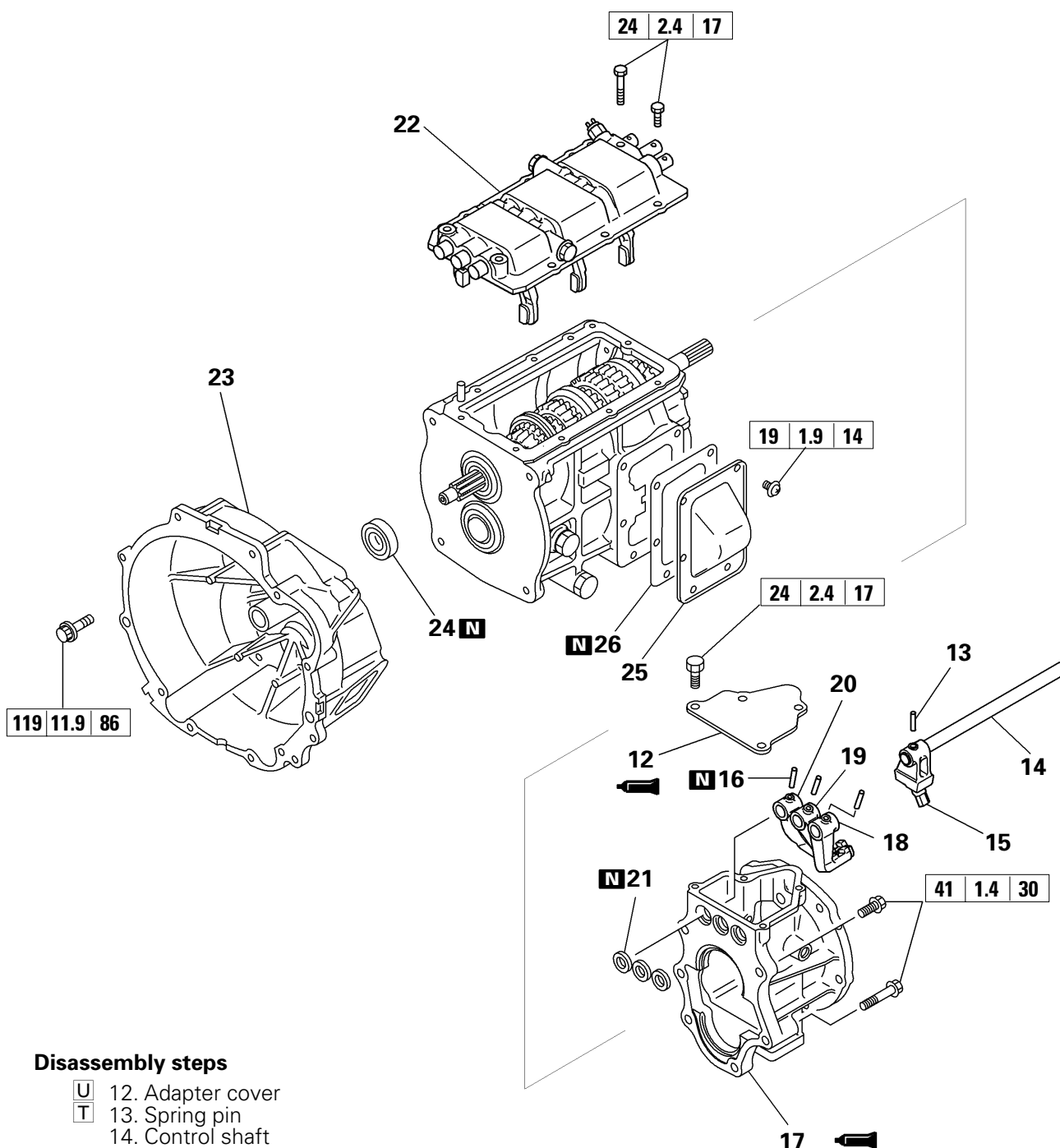
V5MT1-4, 8, 9, B, C, D From 2002 Models



TRM1581

Disassembly steps

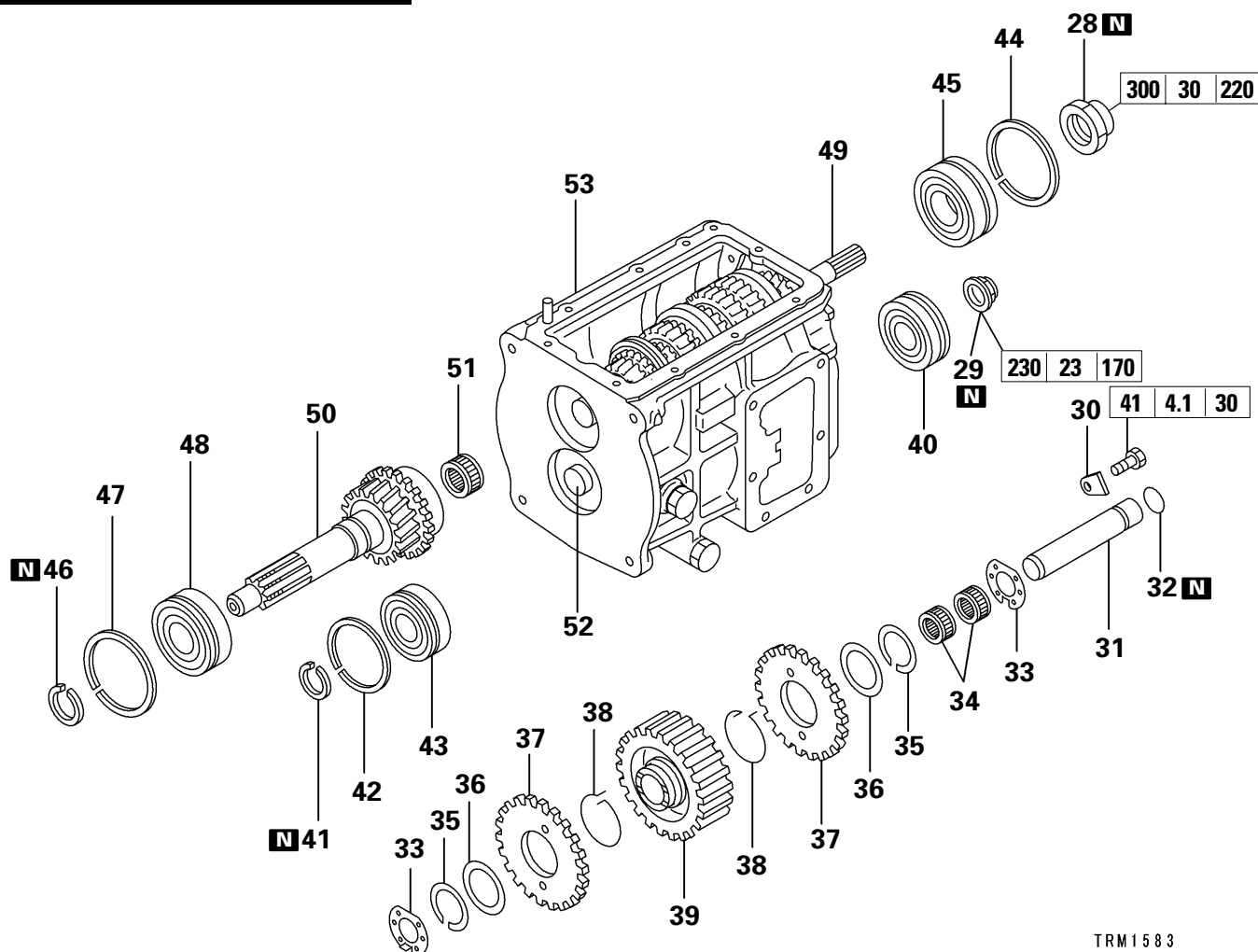
- Ⓐ P 1. Spring pin
- 2. Transfer assembly
- 3. Change shifter
- Ⓥ V 4. Spacer <V5MT1-8-BFGL>
- 5. Plug
- 6. Spring
- 7. Steel ball
- 8. Seal plug
- 9. Neutral return spring
- Ⓢ S 10. Neutral return plunger (B)
- Ⓢ S 11. Neutral return plunger (A)

V5MT1-4, 8, 9, B, C, D
From 2002 Models

Disassembly steps

- U** 12. Adapter cover
- T** 13. Spring pin
- 14. Control shaft
- 15. Control finger
- B** **M** 16. Spring pin
- L** 17. Transfer case adapter
- L** 18. 1st-2nd gear shift jaw
- L** 19. 3rd-4th gear shift jaw
- L** 20. 5th-reverse gear shift jaw
- L** 21. Seal ring
- K** 22. Gear shift case
- J** 23. Clutch housing
- I** 24. Oil seal
- 25. Power take off cover
- 26. Power take off cover gasket

TRM1582

V5MT1-4, 8, 9, B, C, D From 2002 Models



TRM1583

Disassembly steps

- Ⓒ 28. Lock nut
- Ⓘ 29. Lock nut
- 30. Lock piece
- Ⓓ 31. Reverse shaft
- 32. O-ring
- 33. Side washer
- 34. Needle bearing
- 35. Snap ring
- 36. Spacer
- 37. Sub gear
- 38. Spring
- 39. Reverse gear
- Ⓔ 40. Ball bearing
- 41. Snap ring
- 42. Snap ring
- Ⓔ 43. Ball bearing
- Ⓕ 44. Snap ring
- Ⓕ 45. Ball bearing
- 46. Snap ring
- 47. Snap ring
- Ⓕ 48. Ball bearing
- Ⓖ 49. Main shaft assembly
- Ⓖ 50. Drive pinion
- Ⓕ 51. Pilot bearing
- Ⓗ 52. Counter shaft assembly
- 53. Transmission case

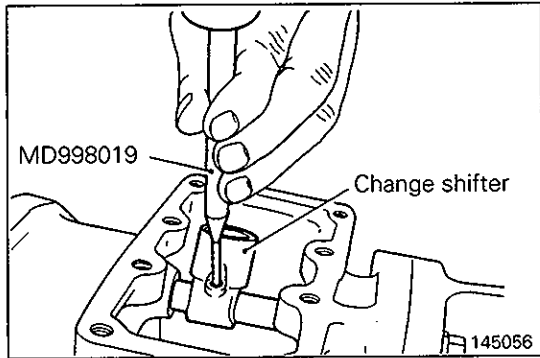
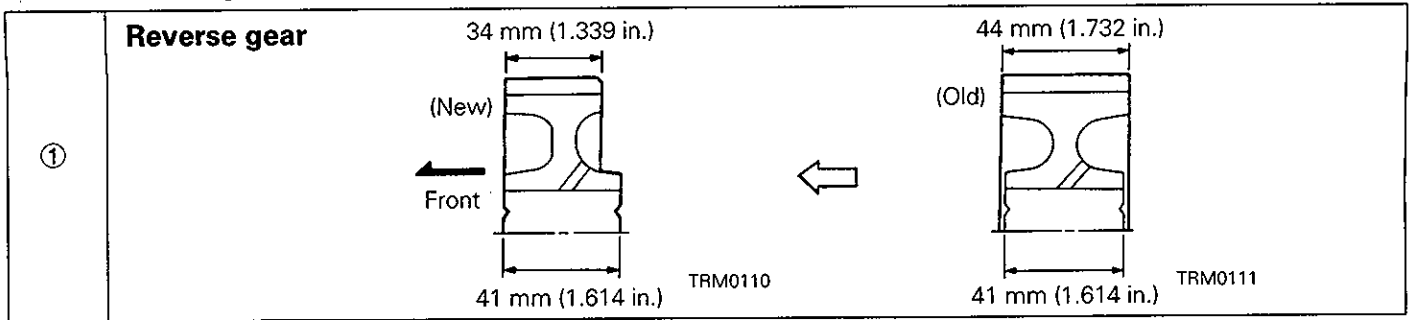
Reassembly steps

- 53. Transmission case
- Ⓐ 52. Counter shaft assembly
- Ⓑ 48. Ball bearing
- 46. Snap ring
- Ⓒ 50. Drive pinion
- 47. Snap ring
- Ⓒ 51. Pilot bearing
- Ⓒ 49. Main shaft assembly
- 44. Snap ring
- Ⓓ 45. Ball bearing
- 42. Snap ring
- Ⓔ 43. Ball bearing
- 41. Snap ring
- Ⓕ 40. Ball bearing
- Ⓖ 39. Reverse gear
- 38. Spring
- Ⓕ 37. Sub gear
- 36. Spacer
- 35. Snap ring
- 34. Needle bearing
- Ⓖ 33. Side washer
- 32. O-ring
- 31. Reverse shaft
- 30. Lock piece
- ⒴ 29. Lock nut
- Ⓗ 28. Lock nut

V5MT1-6-B only

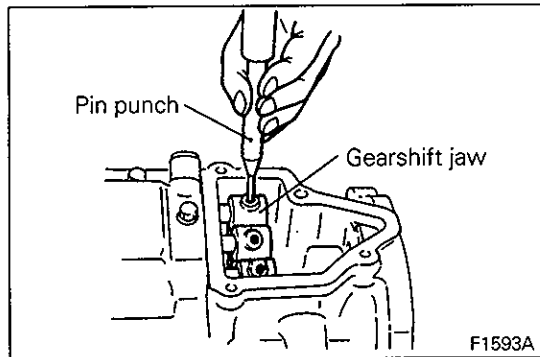
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Details of Change

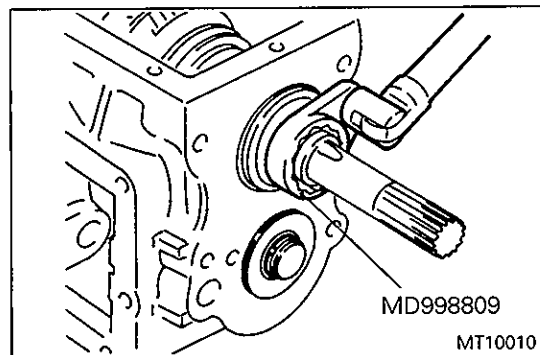


SERVICE POINTS OF DISASSEMBLY

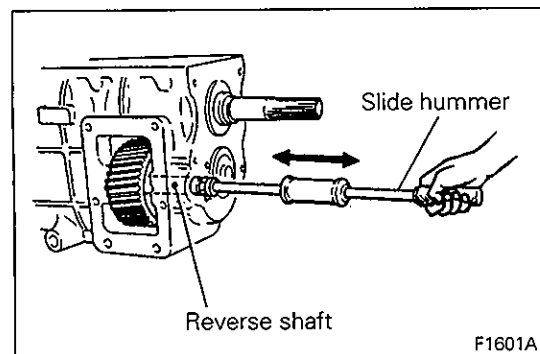
Ⓐ REMOVAL OF SPRING PIN



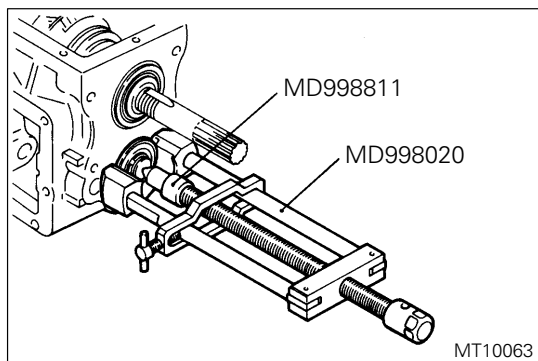
Ⓑ REMOVAL OF SPRING PINS



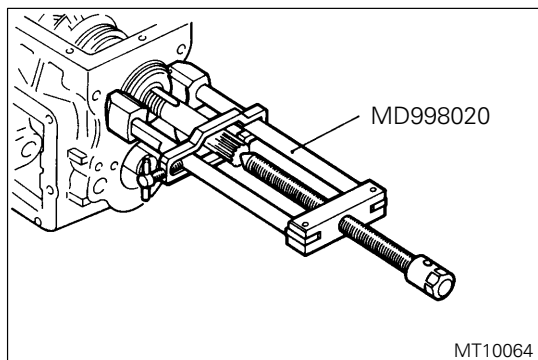
Ⓒ REMOVAL OF LOCKING NUT



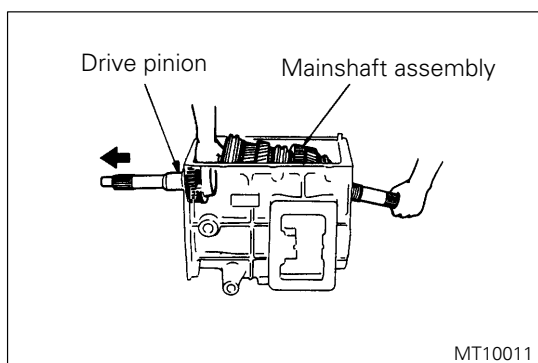
Ⓓ REMOVAL OF REVERSE SHAFT



Ⓔ REMOVAL OF COUNTERSHAFT BALL BEARINGS

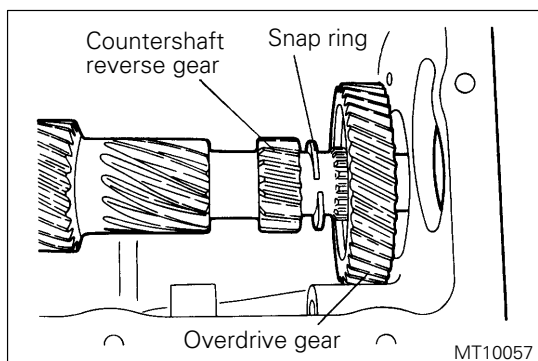


Ⓕ REMOVAL OF MAINSHAFT BALL BEARING / DRIVE PINION BALL BEARING



Ⓖ REMOVAL OF MAINSHAFT ASSEMBLY / DRIVE PINION

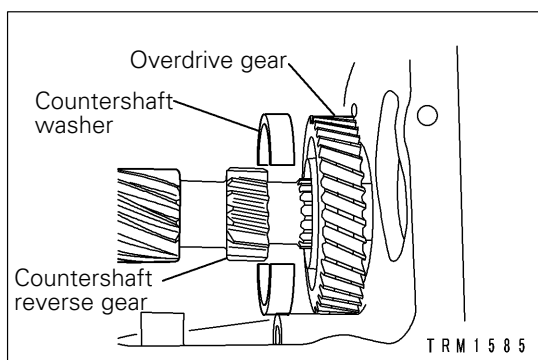
- (1) Pull out the drive pinion to the front of the case. The gear diameter is larger than the case hole diameter so that the drive pinion cannot be removed at this point.
- (2) Remove the main shaft assembly from the case.
- (3) Remove the drive pinion.



Ⓗ REMOVAL OF COUNTERSHAFT

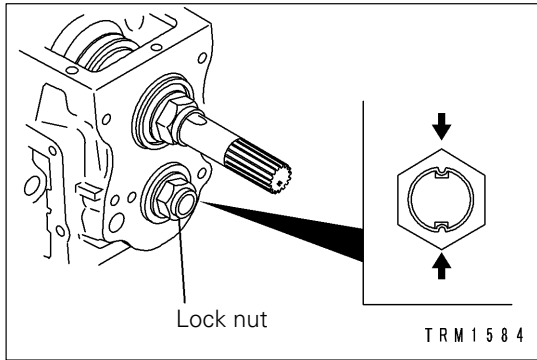
<Snap ring type>

- (1) Move the snap ring from its groove toward the countershaft reverse gear.
- (2) Move the overdrive gear as well toward the countershaft reverse gear.
- (3) Raise the countershaft a little and then lift it further up at its front end to remove from the transmission case.



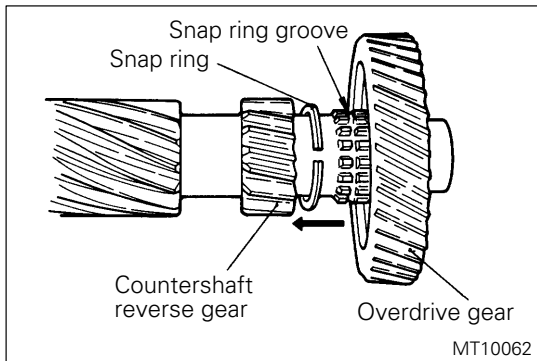
<Washer type>

- (1) Remove the countershaft washer after moving the overdrive gear toward the case.
- (2) Move the overdrive gear toward the countershaft reverse gear.
- (3) Lift the countershaft slightly, then raise its front end to take the countershaft out of the transmission case.



① REMOVAL OF LOCK NUT

- (1) Use a chisel to undo the clinches on the lock nut.
- (2) Prevent the countershaft from turning by moving the 1st-2nd speed synchronizer sleeve toward the 1st speed gear and the OD-R synchronizer sleeve toward the reverse gear such that the two countershaft gears engage with the mating main shaft gears simultaneously.
- (3) Remove the lock nut.

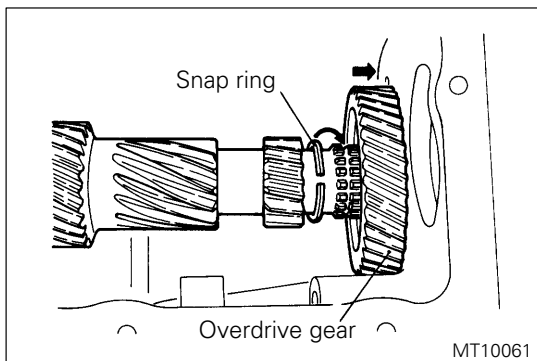


SERVICE POINTS OF REASSEMBLY

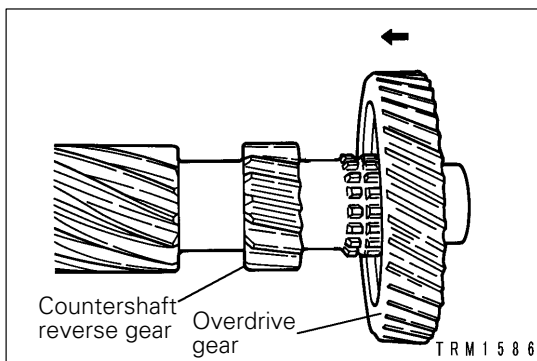
A INSTALLATION OF COUNTERSHAFT

<Snap ring type>

- (1) Move the snap ring and overdrive gear toward the countershaft reverse gear.
- (2) Install the countershaft in the transmission case.

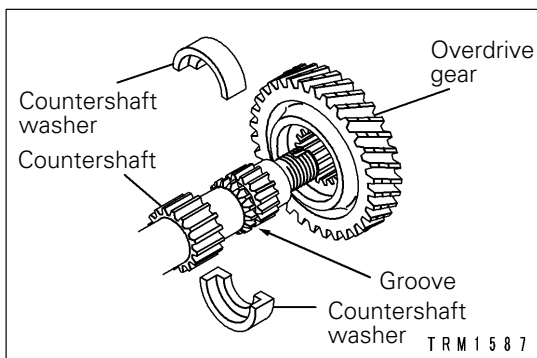


- (3) Move the overdrive gear rearward.
- (4) Put the snap ring in its groove.

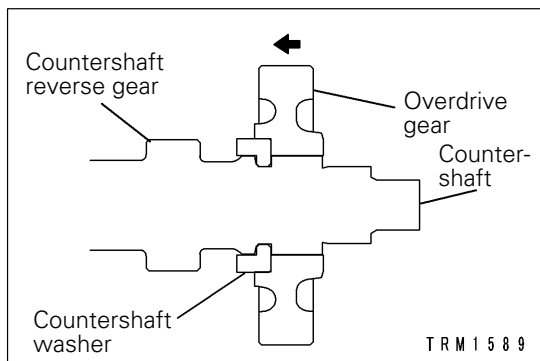


<Washer type>

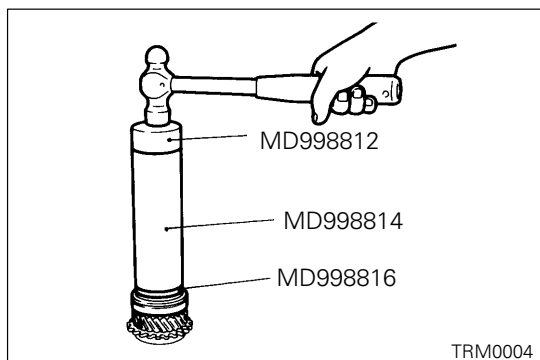
- (1) Move the overdrive gear toward the countershaft reverse gear.
- (2) Put the countershaft in position in the transmission case.



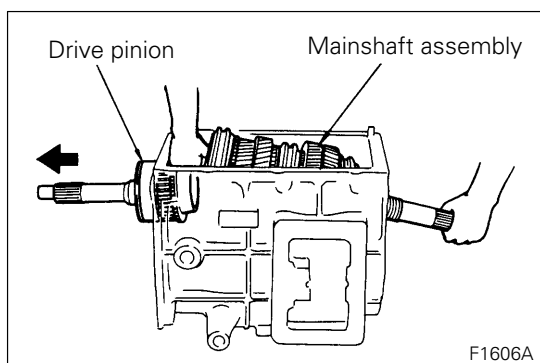
- (3) Move the overdrive gear toward the transmission case.
- (4) Install both the halves of the countershaft washer with their rims fitted in the groove formed in the countershaft.



- (5) Move the overdrive gear toward the countershaft reverse gear such that the countershaft washer is held under the overdrive gear.



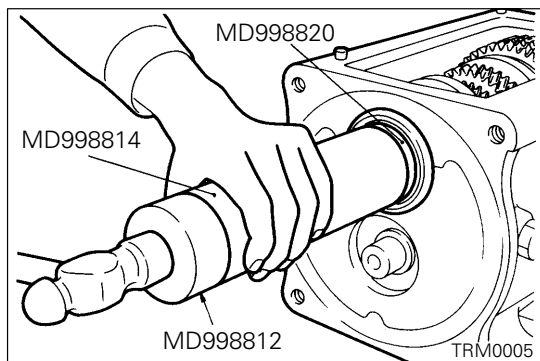
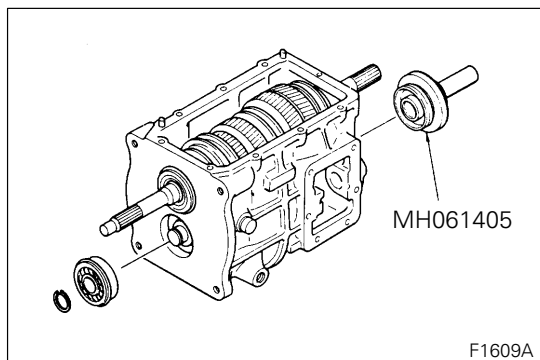
B INSTALLATION OF BALL BEARING



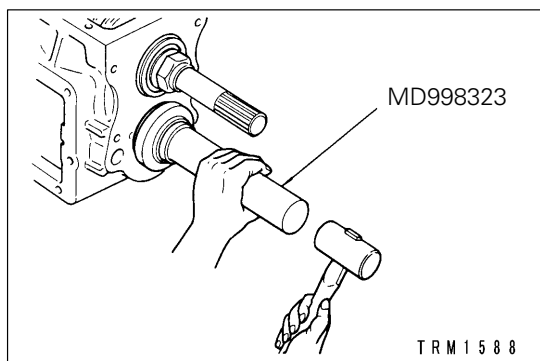
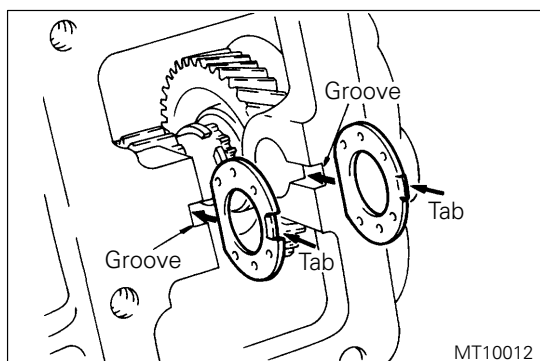
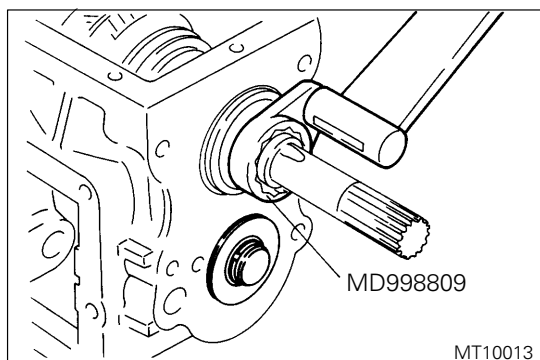
C INSTALLATION OF DRIVE PINION / PILOT BEARING / MAINSHAFT ASSEMBLY

- (1) Install the drive pinion to the transmission case, working from case inside and let it protrude from the case.
- (2) Fit the snap ring in the ball bearing outer race groove.
- (3) Insert the pilot bearing into the drive pinion rear hole.
- (4) Install the main shaft assembly to the case, working from case inside and insert its front end into the pilot bearing.
- (5) Push in the drive pinion until the snap ring over the bearing comes into contact with the case front. When doing so, hold the main shaft. If the front end of the main shaft is disengaged from the pilot bearing, it can cause damage to the bearing.

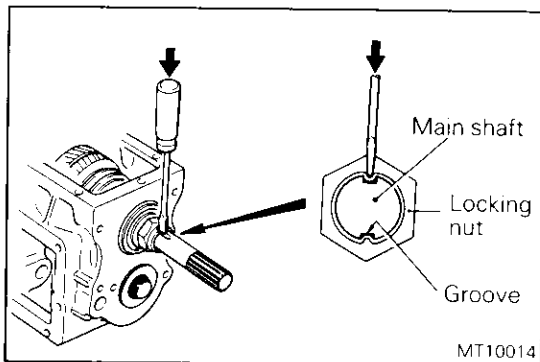
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**D INSTALLATION OF BALL BEARING****E INSTALLATION OF BALL BEARING**

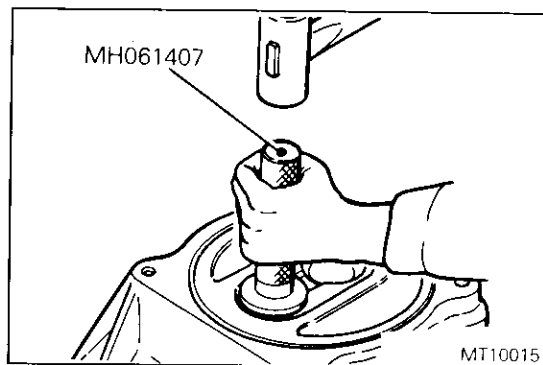
- (1) Fit the snap ring to the ball bearing outer race groove.
- (2) Using the special tool, support the countershaft at the rear end.
- (3) Using the special tool, install the ball bearing.
- (4) Fit the snap ring to the countershaft front end groove.
- (5) Remove the special tool.

**F INSTALLATION OF BALL BEARING****G INSTALLATION OF SIDE WASHERS****H INSTALLATION OF LOCKING NUT**

- (1) Slide the 1-2 speed synchronizer sleeve to the 1st speed side and the 5-reverse synchronizer sleeve to the reverse side for double meshing. This prevents the main shaft from turning.
- (2) Using the special tool, tighten the lock nut to specified torque.



- (3) Punch the lock nut into two grooves on the main shaft.

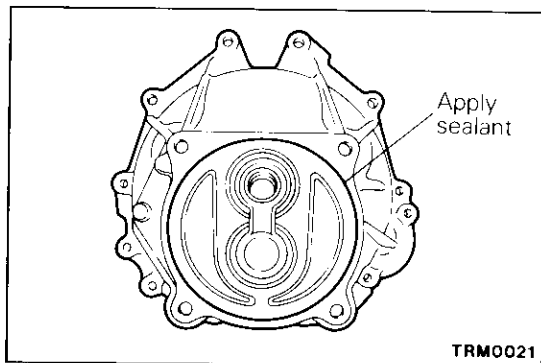


I INSTALLATION OF OIL SEAL

- (1) Using the special tool, drive the oil seal into the clutch housing.
- (2) Apply specified grease to the oil seal lip.

Specified grease:

Multipurpose grease SAE J310, NLGI No. 2

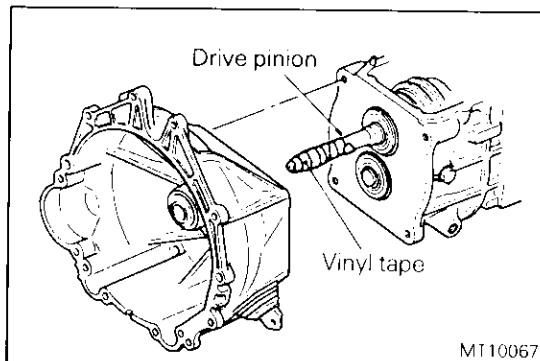


J INSTALLATION OF CLUTCH HOUSING

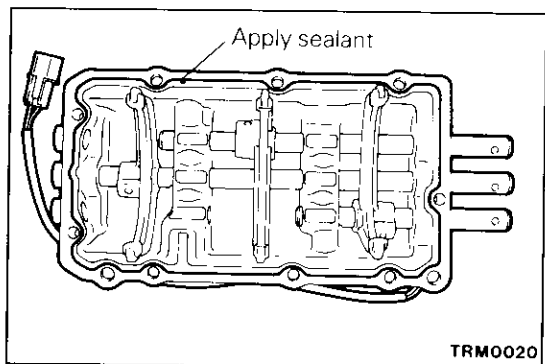
- (1) Apply specified sealant to the clutch housing on its surface that contacts the transmission case.

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent



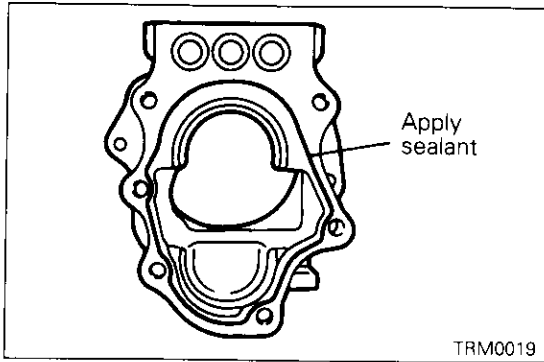
- (2) Wind vinyl tape around the splined portion of the drive pinion to protect the oil seal against damage.
- (3) Install the clutch housing to the transmission case and tighten bolts to specified torque.
- (4) Remove the vinyl tape.



K APPLICATION OF SEALANT TO GEAR SHIFT CASE

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent

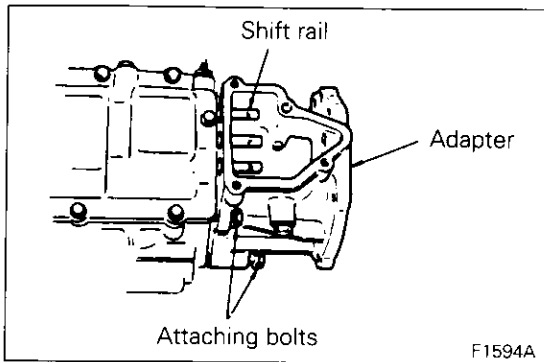


L INSTALLATION OF TRANSFER CASE ADAPTER / SHIFT JAWS

- (1) Apply specified sealant to the adapter on its surface that contacts the transmission case.

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent



- (2) Insert the shift rails into the shift rail holes of the transfer case adapter and install the adapter part way. If it is installed to the case completely, the shift jaws cannot be installed.

NOTE

If the replacement of the shift rail or shift jaw is required, replace the shift rail and jaw as a set.

- (3) In case the adapter attaching bolts are to be reused, apply sealant to the bolt threads. (The adapter attaching bolt is a sealant pre-coated bolt.)

Specified sealant:

3M STUD Locking No. 4170 or equivalent

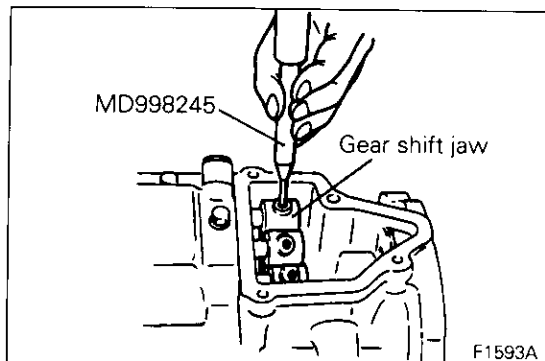
- (4) Screw in adapter attaching bolts two pitches each.
- (5) Install the three shift jaws to respective shift rails.
- (6) Push the adapter into close contact with the case and tighten the six bolts to specified torque.

M INSTALLATION OF SPRING PINS

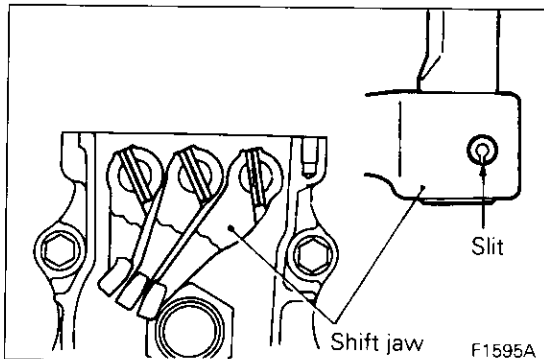
- (1) Align the shift jaw with spring pin hole of the shift rail.
- (2) Using the special tool, drive in the spring pin.

Caution

- Do not reuse the spring pin.



- (3) When driving in the spring pin, make sure that its slit is aligned with the rail center line and that the spring pin is installed flush with the shift jaw end face.



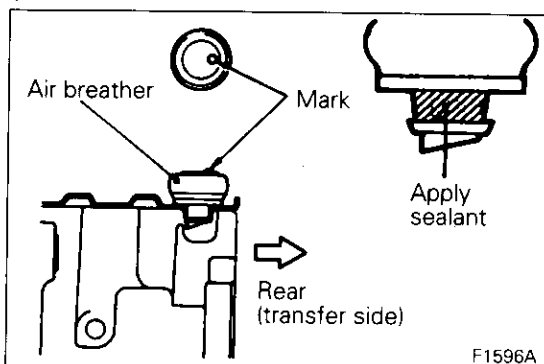
N INSTALLATION OF AIR BREATHER

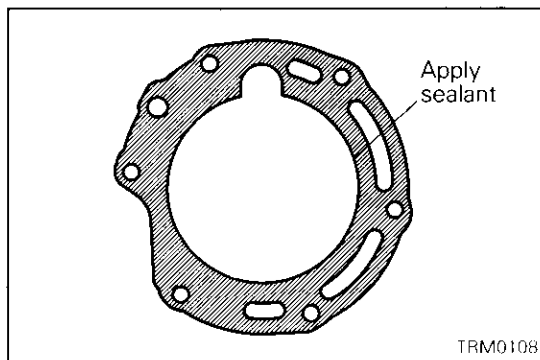
- (1) Apply specified sealant to the press-fit portion of the air breather.

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent

- (2) Install the air breather with a mark toward rear.

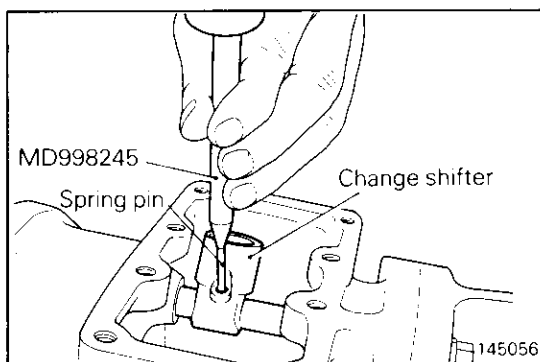




Q APPLICATION OF SEALANT TO ADAPTER GASKET

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent

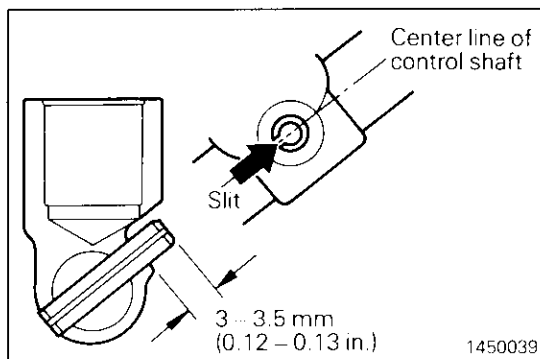


P INSTALLATION OF SPRING PIN

- (1) Install the spring pin using the special tool or a suitable pin punch.

Caution

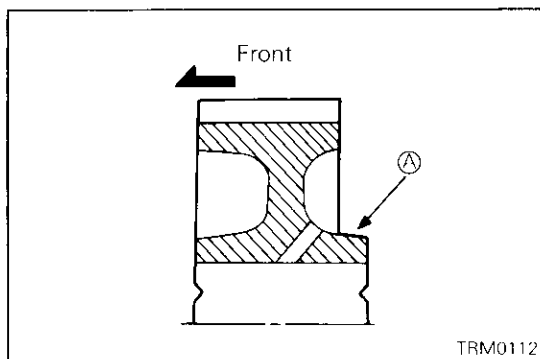
- Do not reuse the spring pins.



- (2) When installing, make sure that the slit of the spring pin is aligned with the control shaft center line. Drive in the spring pin as illustrated, making sure that it will not protrude from the back surface.

NOTE

If the spring pin protrudes from the back side, it will interfere with other parts when the change shifter is operated.

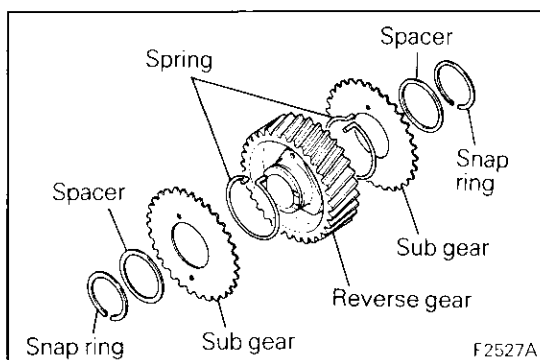


Q INSTALLATION OF REVERSE GEAR (From Jan. 1990)

- (1) Confirm the direction of reverse gear installation by observing the shape of portion A in the illustration.

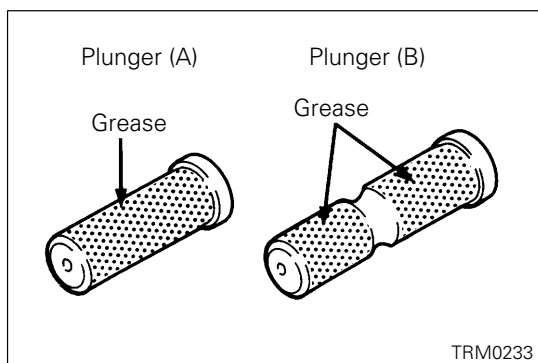
NOTE

Gears from before December 1989 may be installed in either direction. (Refer to Details of Change on Page 22B-3-4.)



R INSTALLATION OF SUB GEAR

- (1) Fit the longer ends of springs into the gear and set the sub gears and spacers with snap rings to join them together as an assembly.
- (2) Turn the sub gears to line up all of the through holes.
- (3) Insert a screwdriver into the through holes to prevent turning when installing the assembly in the case.

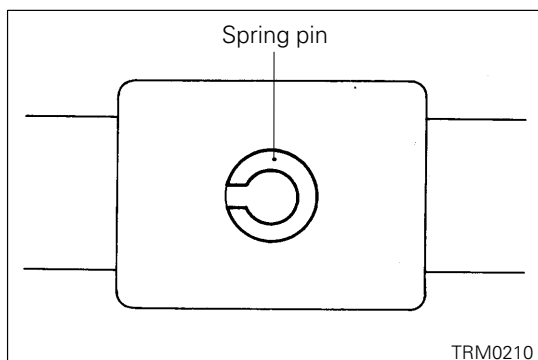


S INSTALLATION OF NEUTRAL RETURN PLUNGER (A) / NEUTRAL RETURN PLUNGER (B)

- (1) Apply grease to the positions of neutral return plungers (A) and (B) as shown in the illustration.

Specified grease:

Multipurpose grease SAE J310, NLGI No. 2

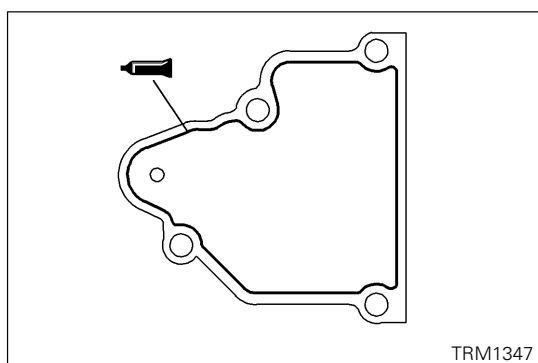


T INSTALLATION OF SPRING PIN

- (1) Install a new spring pin using the pin punch, make sure that the slit of the spring pin is aligned with the control shaft center line.

Caution

- Do not reuse the spring pin.



U INSTALLATION OF ADAPTER COVER

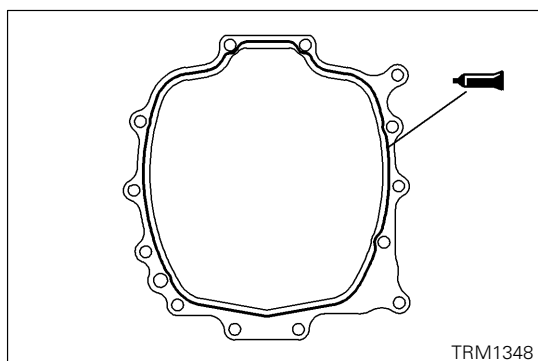
- (1) Apply a bead of sealant to the adapter cover as illustrated.

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent

Caution

- Squeeze sealant out evenly to make sure that it is not broken or excessively supplied.



V INSTALLATION OF SPACER

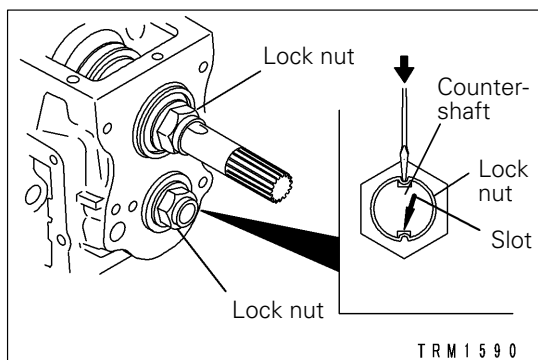
- (1) Apply a bead of sealant to both side of the spacer as illustrated.

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent

Caution

- Squeeze sealant out evenly to make sure that it is not broken or excessively supplied.



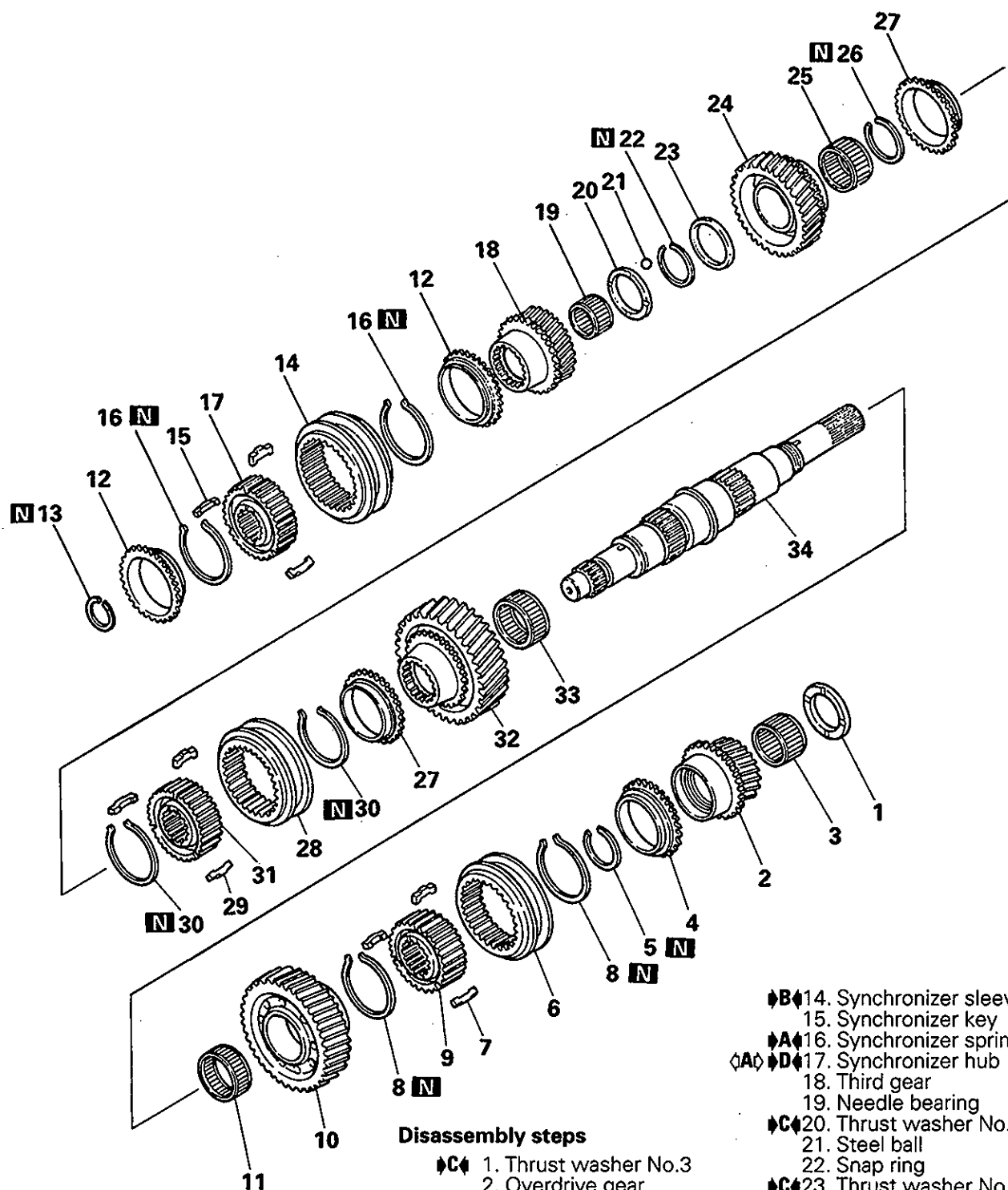
W INSTALLATION OF LOCK NUT

- (1) Loosely tighten both the countershaft and main shaft lock nuts.
- (2) Prevent the countershaft from turning by moving the 1st-2nd speed synchronizer sleeve toward the 1st speed gear and the OD-R synchronizer sleeve toward the reverse gear such that the two countershaft gears engage with the mating main shaft gears simultaneously.
- (3) Tighten the countershaft lock nut to the specified torque.
- (4) Use a chisel to clinch the lock nut at the two locations corresponding the slots in the countershaft.

NOTES

4. MAINSHAFT

V5MT1-1, 2

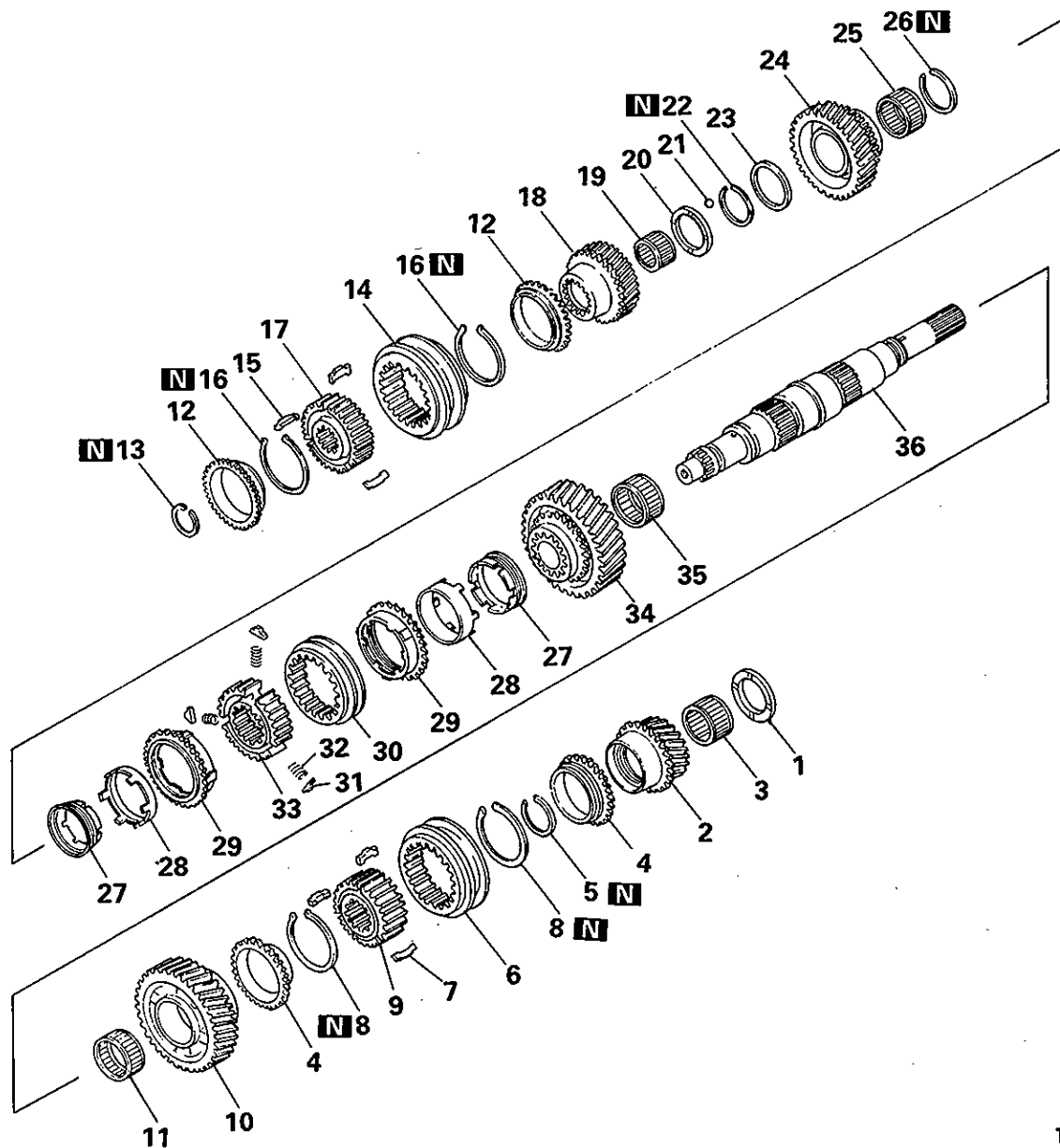


Disassembly steps

- ◆C 1. Thrust washer No.3
- 2. Overdrive gear
- 3. Needle bearing
- 4. Synchronizer ring
- 5. Snap ring
- ◆B 6. Synchronizer sleeve
- 7. Synchronizer key
- ◆A 8. Synchronizer spring
- 9. Synchronizer hub
- 10. Reverse gear
- 11. Needle bearing
- 12. Synchronizer ring
- 13. Snap ring

- ◆B 14. Synchronizer sleeve
- 15. Synchronizer key
- ◆A 16. Synchronizer spring
- ◆D 17. Synchronizer hub
- 18. Third gear
- 19. Needle bearing
- ◆C 20. Thrust washer No. 1
- 21. Steel ball
- 22. Snap ring
- ◆C 23. Thrust washer No. 2
- 24. Second gear
- 25. Needle bearing
- 26. Snap ring
- ◆E 27. Synchronizer ring
- ◆B 28. Synchronizer sleeve
- 29. Synchronizer key
- ◆A 30. Synchronizer spring
- 31. Synchronizer hub
- 32. First gear
- 33. Needle bearing
- 34. Main shaft

V5MT1-3

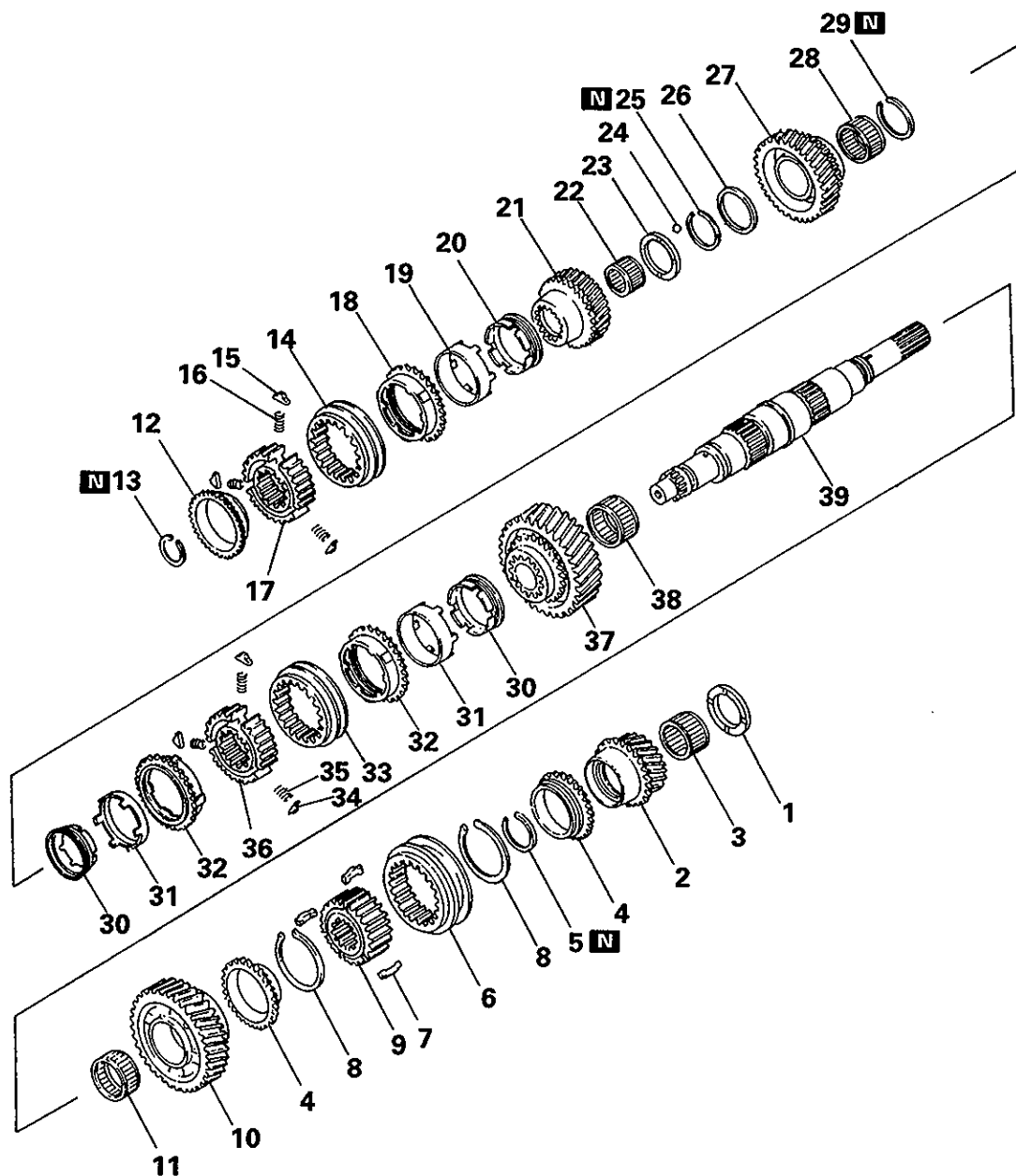


TRM0237

Disassembly steps

- | | | | |
|-----|-------------------------|--------------------|-----------------------------|
| ◆C◆ | 1. Thrust washer No. 3 | 19. Needle bearing | |
| | 2. Overdrive gear | ◆C◆ | 20. Thrust washer No. 1 |
| | 3. Needle bearing | | 21. Steel ball |
| | 4. Synchronizer ring | | 22. Snap ring |
| | 5. Snap ring | ◆C◆ | 23. Thrust washer No. 2 |
| | 6. Synchronizer sleeve | | 24. Second gear |
| | 7. Synchronizer key | | 25. Needle bearing |
| ◆A◆ | 8. Synchronizer spring | | 26. Snap ring |
| | 9. Synchronizer hub | | 27. Inner synchronizer ring |
| | 10. Reverse gear | | 28. Synchronizer cone |
| | 11. Needle bearing | | 29. Outer synchronizer ring |
| | 12. Synchronizer ring | | 30. Synchronizer sleeve |
| | 13. Snap ring | | 31. Synchronizer key |
| | 14. Synchronizer sleeve | | 32. Synchronizer spring |
| | 15. Synchronizer key | | 33. Synchronizer hub |
| ◆A◆ | 16. Synchronizer spring | | 34. First gear |
| ◆A◆ | 17. Synchronizer hub | | 35. Needle bearing |
| | 18. Third gear | | 36. Mainshaft |

V5MT1-4, 6, B, 8

**Disassembly steps**

- ◆C◆ 1. Thrust washer No.3
- 2. Overdrive gear
- 3. Needle bearing
- 4. Synchronizer ring
- 5. Snap ring
- ◆B◆ 6. Synchronizer sleeve
- 7. Synchronizer key
- ◆A◆ 8. Synchronizer spring
- 9. Synchronizer hub
- 10. Reverse gear
- 11. Needle bearing
- 12. Synchronizer ring
- 13. Snap ring

- ◆B◆ 14. Synchronizer sleeve
- 15. Synchronizer key
- 16. Synchronizer spring
- ◆A◆ ◆D◆ 17. Synchronizer hub
- 18. Outer synchronizer ring
- 19. Synchronizer cone
- 20. Inner synchronizer ring
- 21. Third gear
- 22. Needle bearing
- ◆C◆ 23. Thrust washer No. 1
- 24. Steel ball
- ◆C◆ 25. Snap ring
- ◆C◆ 26. Thrust washer No. 2

- 27. Second gear
- 28. Needle bearing
- 29. Snap ring
- 30. Inner synchronizer ring
- 31. Synchronizer cone
- 32. Outer synchronizer ring
- ◆F◆ 33. Synchronizer sleeve
- 34. Synchronizer key
- 35. Synchronizer spring
- 36. Synchronizer hub
- 37. First gear
- 38. Needle bearing
- 39. Main shaft

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Details of Change

② Second gear and third gear

The helix angles of the gear teeth have been changed.

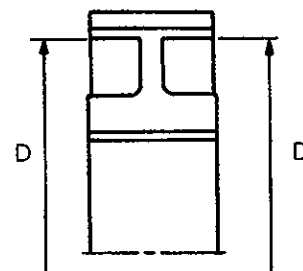
	New	Old
Second gear	30°	27.4°
Third gear	29°	27.5°

Synchronizer hubs (1st-2nd and 5th-R)

	New	Old
Diameter "D"	80.3 mm (3.16 in.)	80.6 mm (3.17 in.)

NOTE

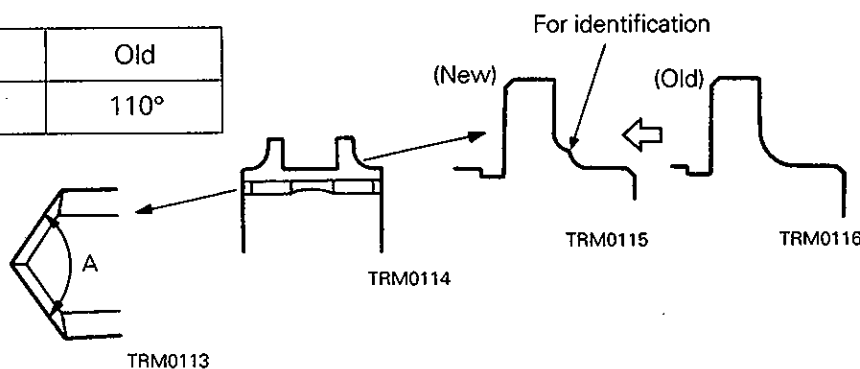
When the synchronizer of paper lining type is used, do not use old synchronizer hub.



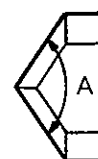
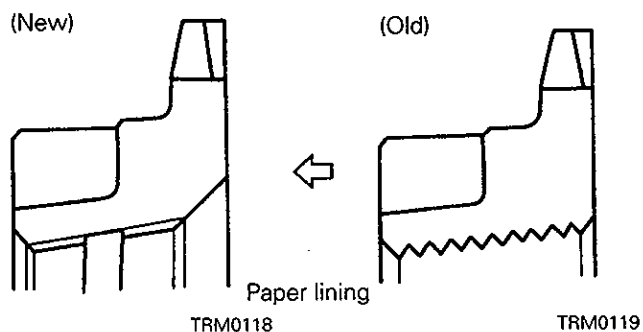
TRM0117

Synchronizer sleeve (1st-2nd)

	New	Old
Bevel angle "A"	103°	110°



Synchronizer ring (1st-2nd)

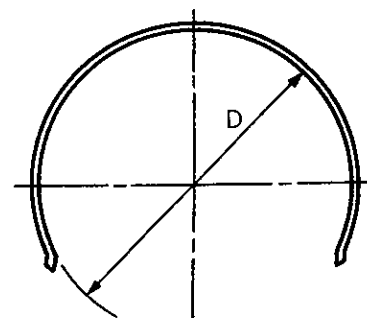


TRM0120

	New	Old
Bevel angle "A"	103°	110°

Synchronizer spring (1st-2nd)

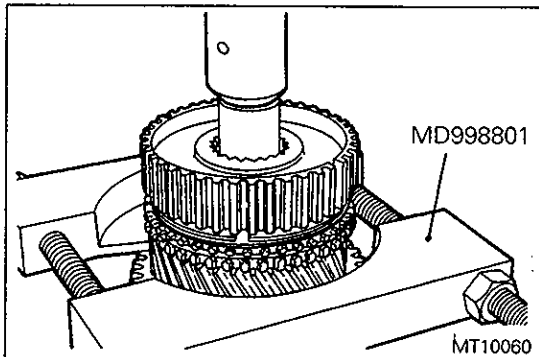
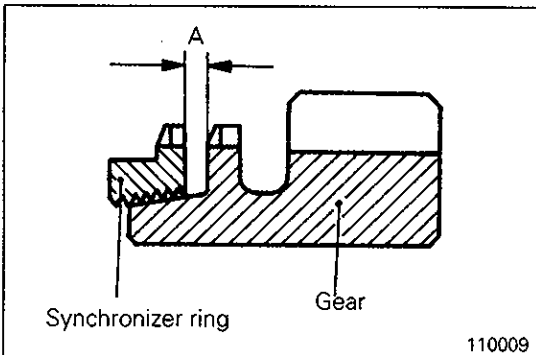
	New	Old
Diameter "D"	82.5 mm (3.25 in.)	79.2 mm (3.12 in.)



TRM0121

SERVICE POINTS OF DISASSEMBLY**PRECAUTIONS OF DISASSEMBLY**

- (1) The synchronizer has many common parts. Group those parts for 1-2 speed, 3-4 speed and 5-reverse for correct reassembly.
- (2) Identify the front and rear directions.

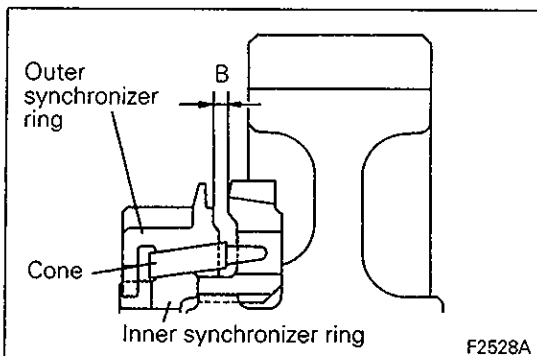
**◀A▶ REMOVAL OF SYNCHRONIZER HUB****INSPECTION****SYNCHRONIZER RING**

- (1) Combine the synchronizer ring with each speed gear and measure dimension A shown in the figure. If dimension A is smaller than the limit, replace the ring or the gear or both.

Limit: 0.2 mm (0.008 in.)

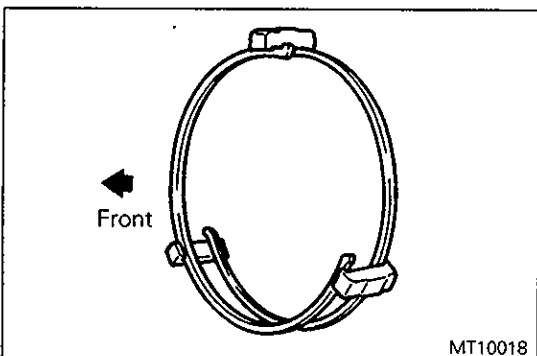
Caution

- When the paper lining synchronizer ring is washed, manual transmission oil must be used.

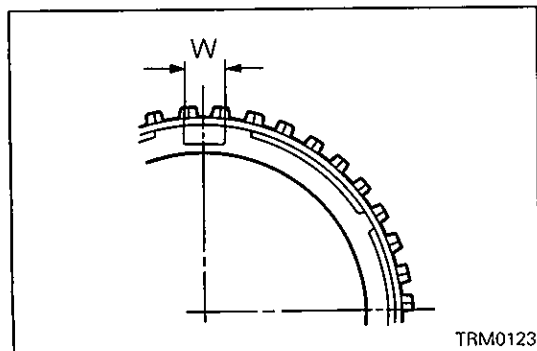
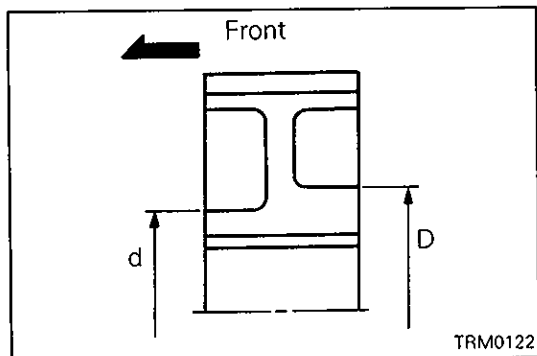
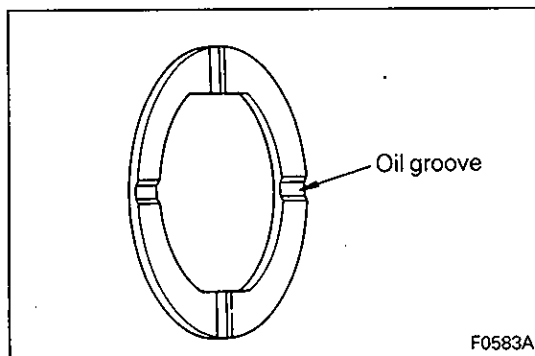
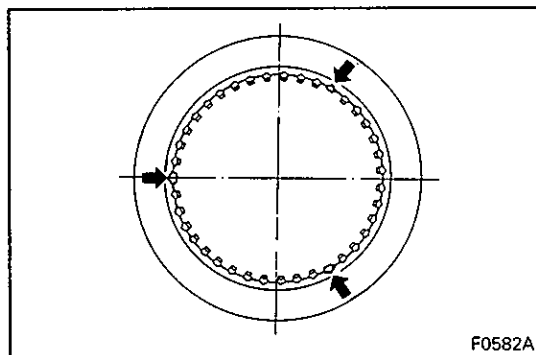
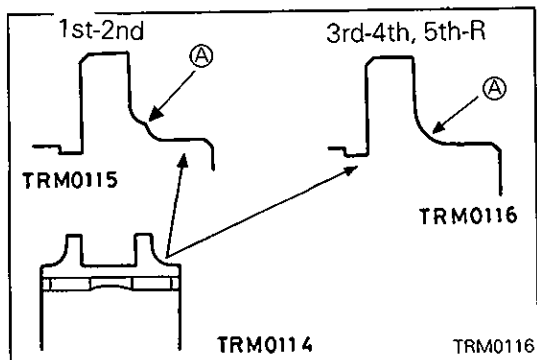
**OUTER SYNCHRONIZER RING / INNER SYNCHRONIZER RING / SYNCHRONIZER CONE**

- (1) Combine the inner and outer synchronizer rings and cone with each gear, and measure dimension B in the illustration. If dimension B is under the limit, replace the rings and the cone.

Limit value: 0.3 mm (0.012 in.)

**SERVICE POINTS OF REASSEMBLY****▶A▶ INSTALLATION OF SYNCHRONIZER SPRINGS**

- (1) Note that the 1st-2nd synchronizer spring differs in shape from other synchronizer springs. (Refer to Details of Change on Page 22B-4-3.)
- (2) Install the synchronizer spring in such a way that it will rest on the three synchronizer keys.
- (3) When installing the synchronizer springs, make sure that the front and rear ones are not faced in same direction.



◆B◆ INSTALLATION OF SYNCHRONIZER SLEEVES

- (1) Confirm the installed positions of the synchronizer sleeves by noting difference in the shape of portion ① between the sleeves, as shown in the illustration. All sleeves may be installed in either direction.

- (2) Install the synchronizer sleeve with its low tooth portions at synchronizer key positions.

◆C◆ INSTALLATION OF THRUST WASHERS

- (1) Install the thrust washers with oil grooved side toward the gear.

◆D◆ INSTALLATION OF SYNCHRONIZER HUB FOR THIRD AND FOURTH SPEED

- (1) Confirm the direction of hub installation by noting the diameters d and D in the illustration.

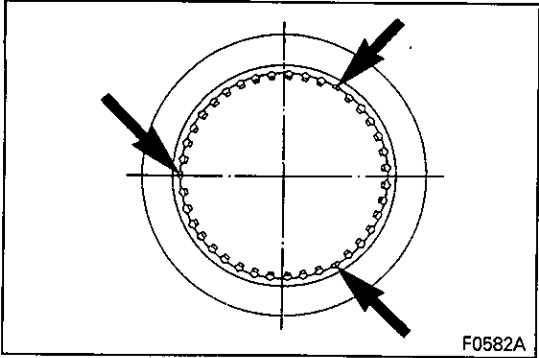
NOTE

The hubs for the 1st-2nd synchronizer and the 5th-R synchronizer may be installed in either direction. (Refer to Details of Change on Page 22B-4-3.)

◆E◆ IDENTIFICATION OF SYNCHRONIZER RINGS

- (1) The synchronizer rings differ in groove width "W" shown in the illustration, for ease of identification.

	Groove width "W" mm (in.)	
	Paper lining type	Conventional type
Ring for 1st gear	8.2 (0.32)	8.7 (0.34)
Ring for 2nd gear	9.8 (0.38)	9.8 (0.38)
Ring for 2nd, 4th and 5th gears	—	9.8 (0.38)

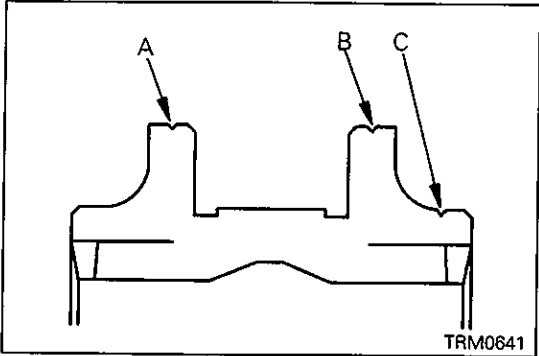


INSTALLATION OF SYNCHRONIZER SLEEVE

(1) Install the synchronizer sleeve while aligning its low tooth portions with the synchronizer keys.

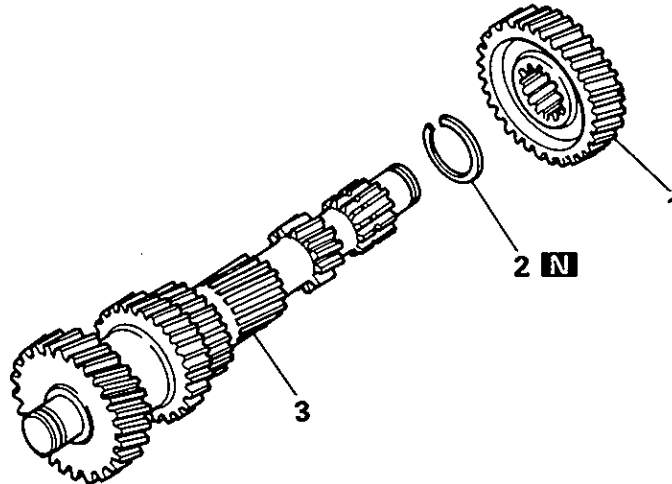
(2) The synchronizer sleeves can be identified by their identification grooves.

Position	Identification groove
1st-2nd and 3rd-4th (same sleeve)	A, B and C
5th-Reverse	A and B



5. COUNTERSHAFT

DISASSEMBLY AND REASSEMBLY



Disassembly steps

1. Overdrive gear
2. Snap ring
3. Countershaft gear

F1616A

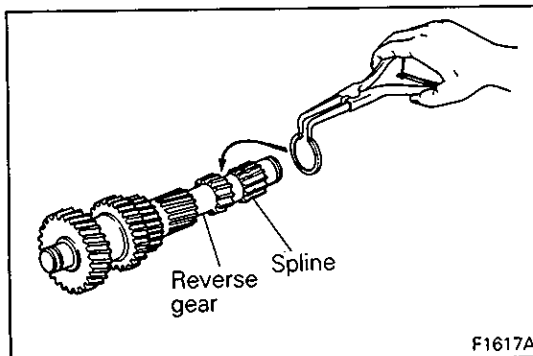
Details of Change

Countershaft gears

The helix angles of the teeth have been changed.

②

	New	Old
Second gear	30°	27.4°
Third gear	29°	27.5°



F1617A

SERVICE POINT OF REASSEMBLY

INSTALLATION OF SNAP RING

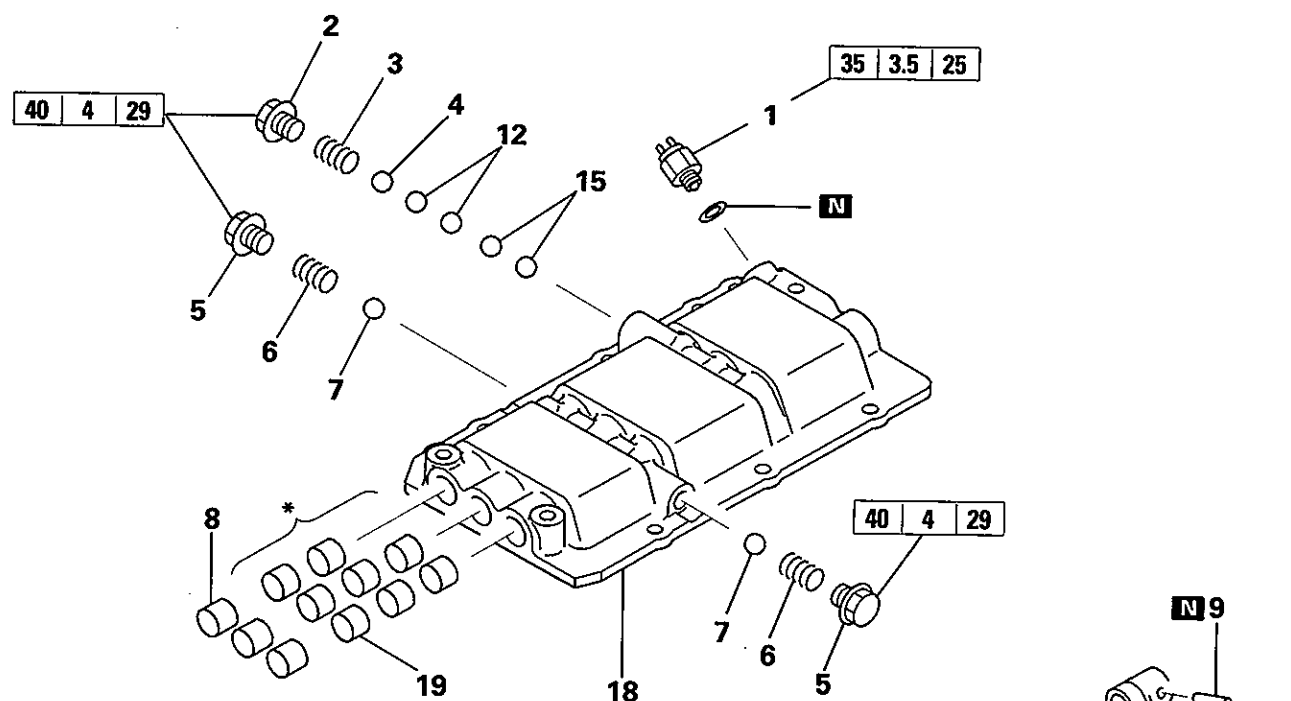
- (1) Do not fit the snap ring in its groove. Fit it on the bearing, beforehand, between the countershaft reverse gear and the spline.

NOTE

Install the countershaft in the transmission case before putting the snap ring in its groove.

NOTES

6. GEAR SHIFT CASE



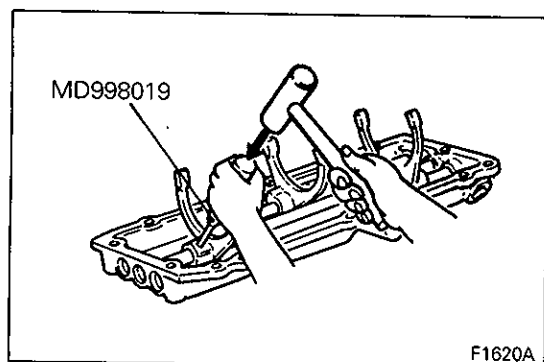
Disassembly steps

1. Backup lamp switch
- [E]** 2. Screw plug
- [D]** 3. Poppet spring
4. Steel ball
- [E]** 5. Screw plug
- [D]** 6. Poppet spring
7. Steel ball
8. Plug
- [A]** **[C]** 9. Spring pin
10. 5th-reverse shift rail
11. Gear shift fork
- [B]** 12. Steel ball
13. 3rd-4th shift rail
14. Gear shift fork
- [B]** 15. Steel ball
16. 1st-2nd shift rail
17. Gear shift fork
18. Gear shift case
- [A]** 19. Teflon bushing

NOTE

*: Provided for some models only

TRM1349

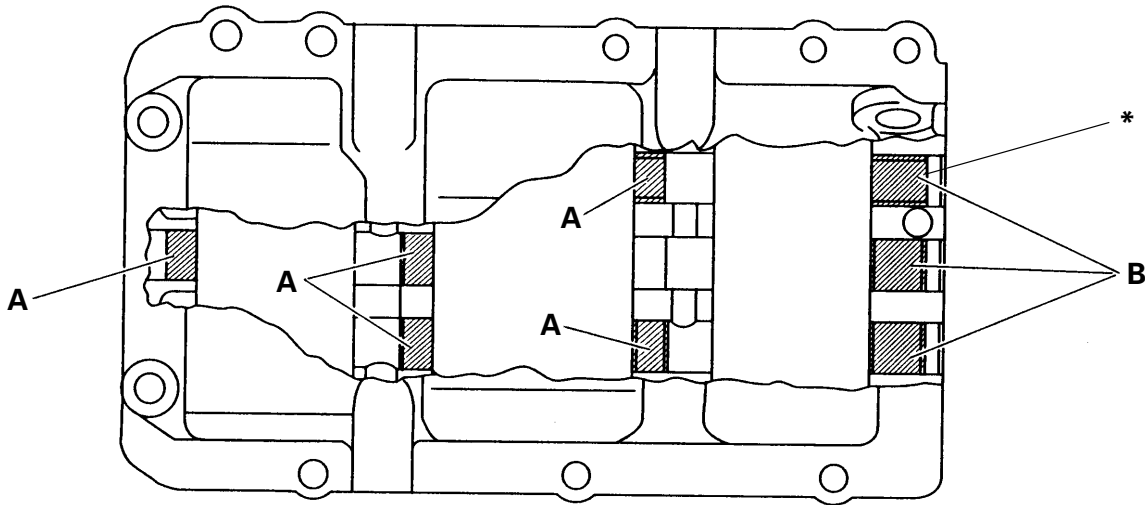


SERVICE POINT OF DISASSEMBLY

[A] REMOVAL OF SPRING PINS

SERVICE POINTS OF REASSEMBLY**A INSTALLATION OF TEFLON BUSHING**

- (1) Before reassembly, check the Teflon bushing in the shift rail.
- (2) Replace the Teflon bushing if it is damaged or cracked. Teflon bushing can be pushed into position by a finger. Install the bushings at illustrated positions. Do not remove the bushing except when it is defective.



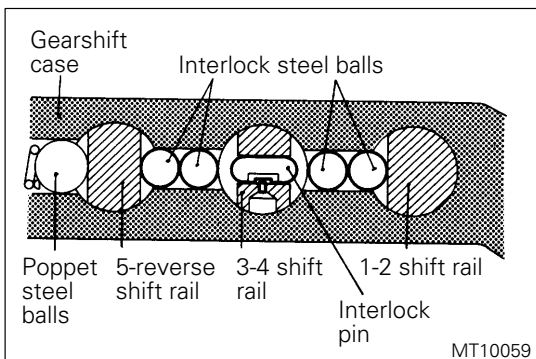
A: 12 mm long teflon bushing
B: 20 mm long teflon bushing

*: Type with a switch hole (transmissions for certain vehicle models only)

TRM1350

B INSTALLATION OF STEEL BALLS

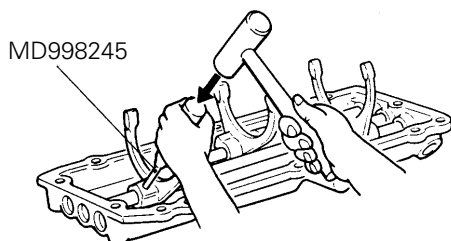
- (1) Install the interlock steel balls, two at a time, in holes between the shift rails.
- (2) Make sure that the interlock pin installed in the 3-4 shift rail moves smoothly.



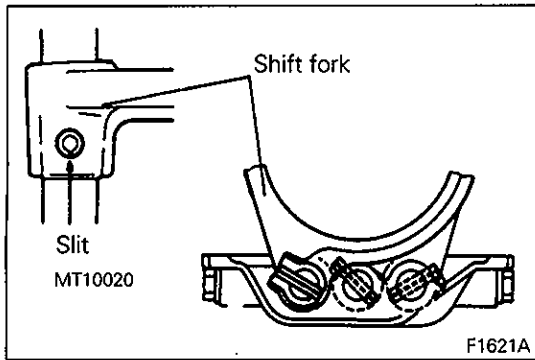
MT10059

C INSTALLATION OF SPRING PINS**Caution**

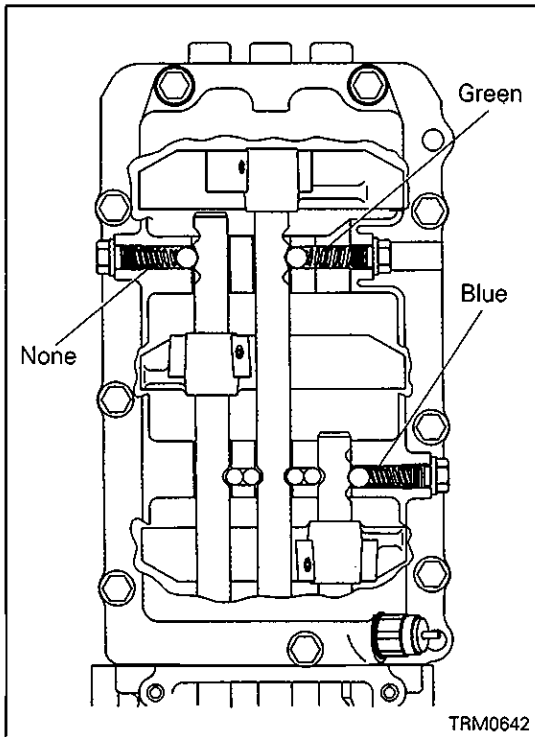
- Do not reuse the spring pin.



F1620A

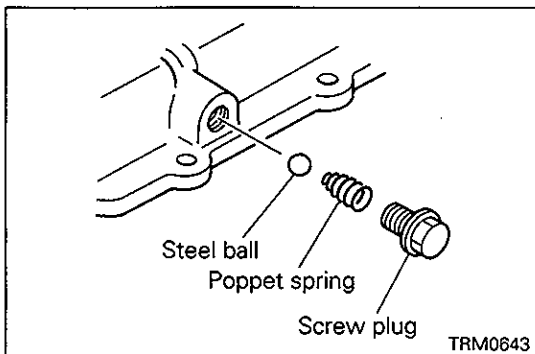


- (3) When driving in the spring pin, make sure that its slit is aligned with the rail center line and that the spring pin is installed flush with the shift fork end face.

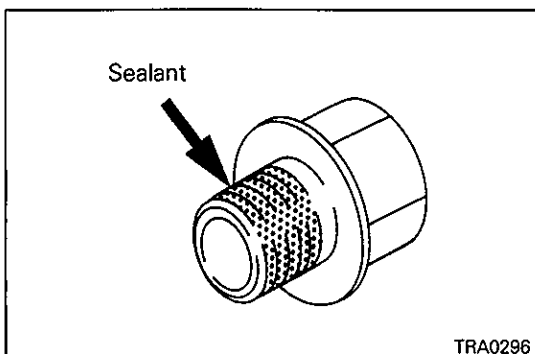


D INSTALLATION OF POPPET SPRINGS <V5MT1-6>

- (1) The poppet springs can be identified by their identification colors. The springs are different in length and spring constant. Be sure to use the correct spring to the correct position.



- (2) In case of the tapered poppet spring, direct its tapered end toward the steel ball.



E INSTALLATION OF SCREW PLUGS <V5MT1-6>

- (1) Apply sealant to the screw plug and install the plug.

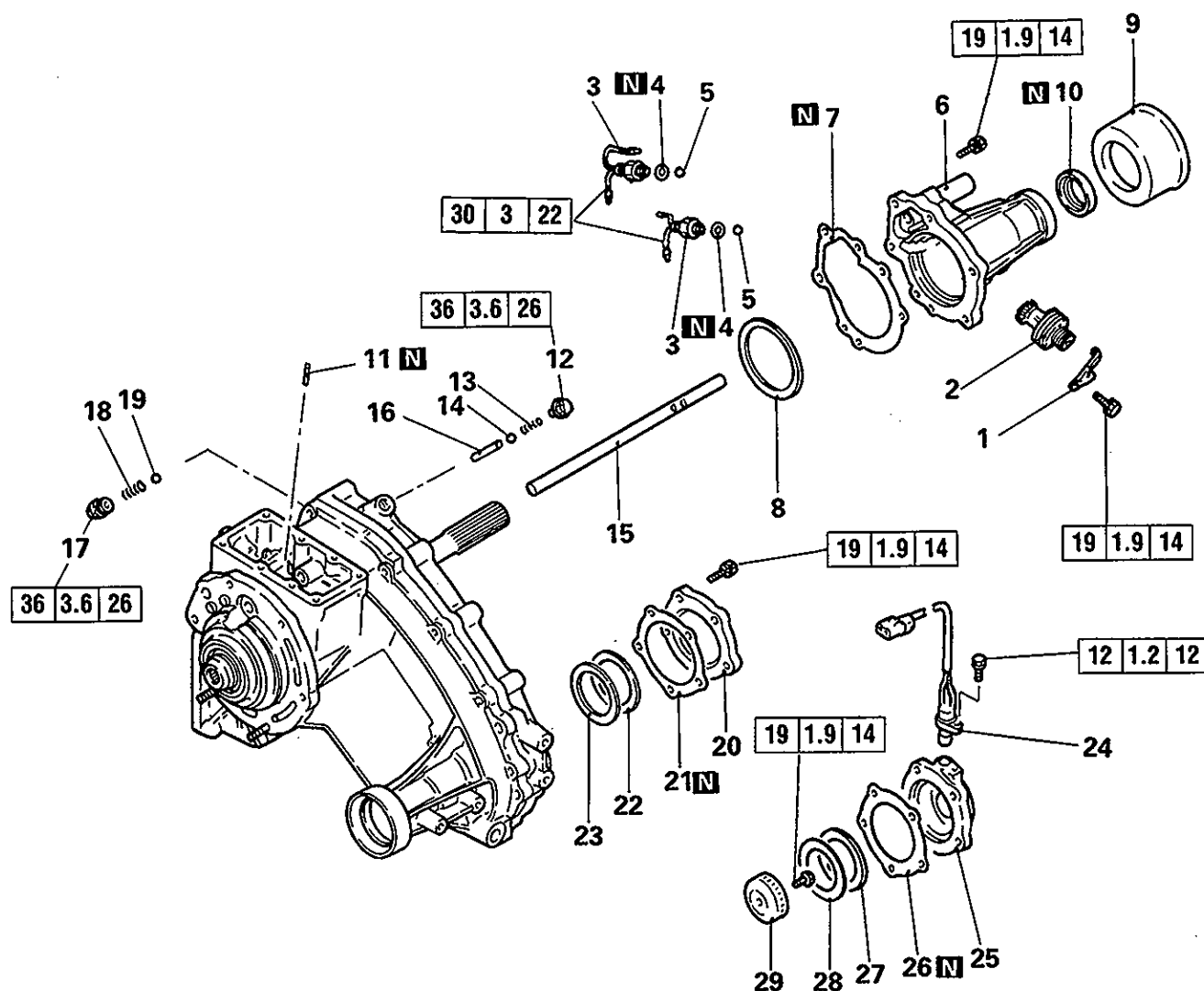
Specified sealant:

3M ATD Part No. 8660 or equivalent

NOTES

7. TRANSFER

V5MT1-1, 2



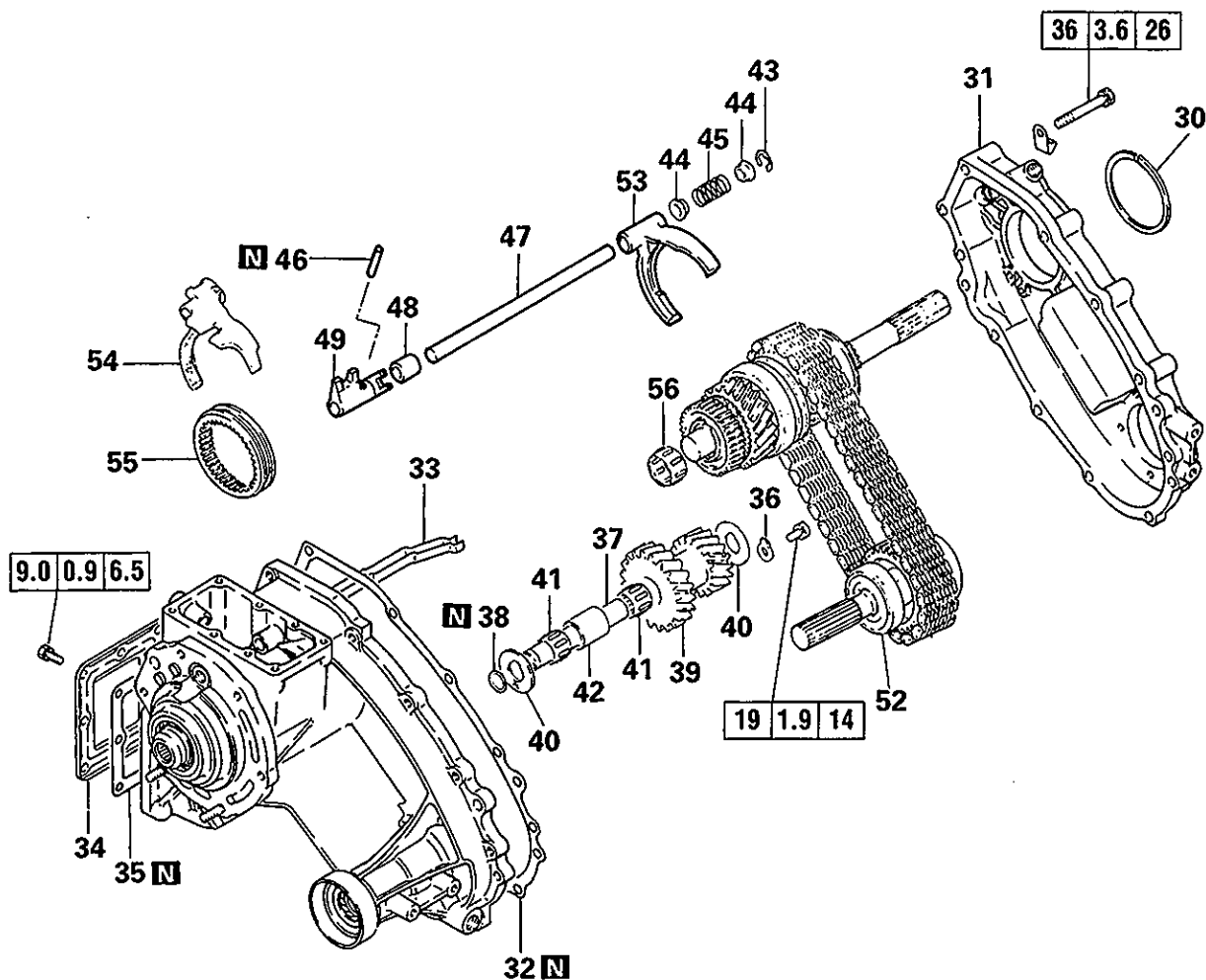
Disassembly steps

1. Sleeve clamp
- ◆Y◆ 2. Speedometer gear
3. 4WD indicator light switch
4. Gasket
5. Steel ball
- ◆W◆ 6. Rear cover
- ◆W◆ 7. Rear cover gasket
- ◆W◆ 8. Spacer
9. Dust seal guard
- ◆U◆ 10. Oil seal
- ◆d◆ 11. Spring pin
- ◆Z◆ 12. Poppet plug
13. Poppet spring
14. Steel ball
- ◆A◆ ◆O◆ 15. H-L shift rail
16. Interlock plunger
- ◆Z◆ 17. Poppet plug
18. Poppet spring
19. Steel ball
- ◆R◆ 20. Cover
- ◆R◆ 21. Cover gasket

22. Spacer
23. Wave spring
24. Pulse generator
- ◆R◆ 25. Cover
- ◆R◆ 26. Cover gasket
27. Spacer
28. Wave spring
29. Pulse rotor

V5MT1-1-AFS
only

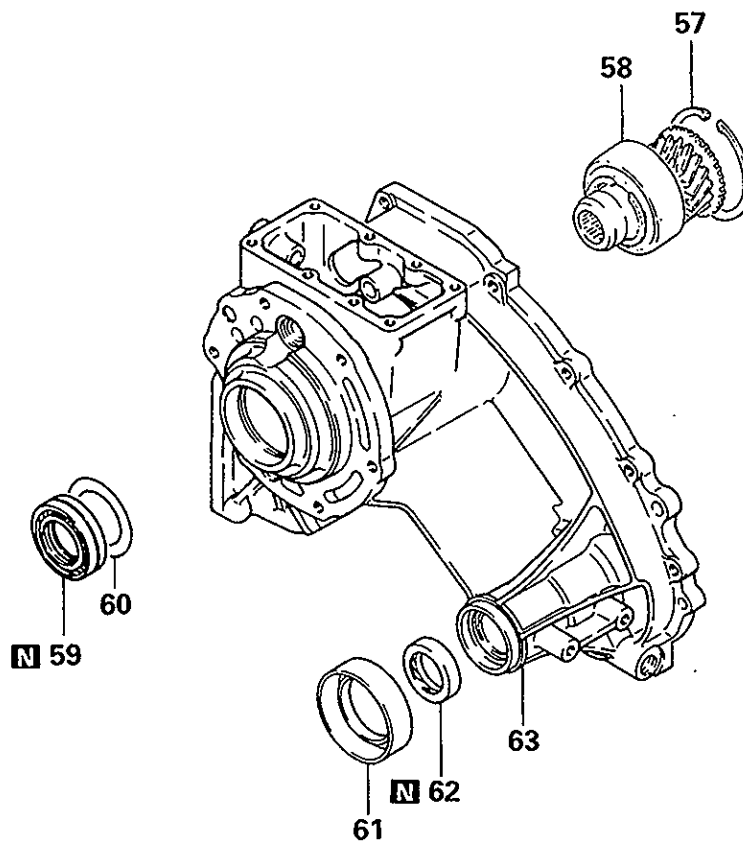
V5MT1-1, 2



Disassembly steps

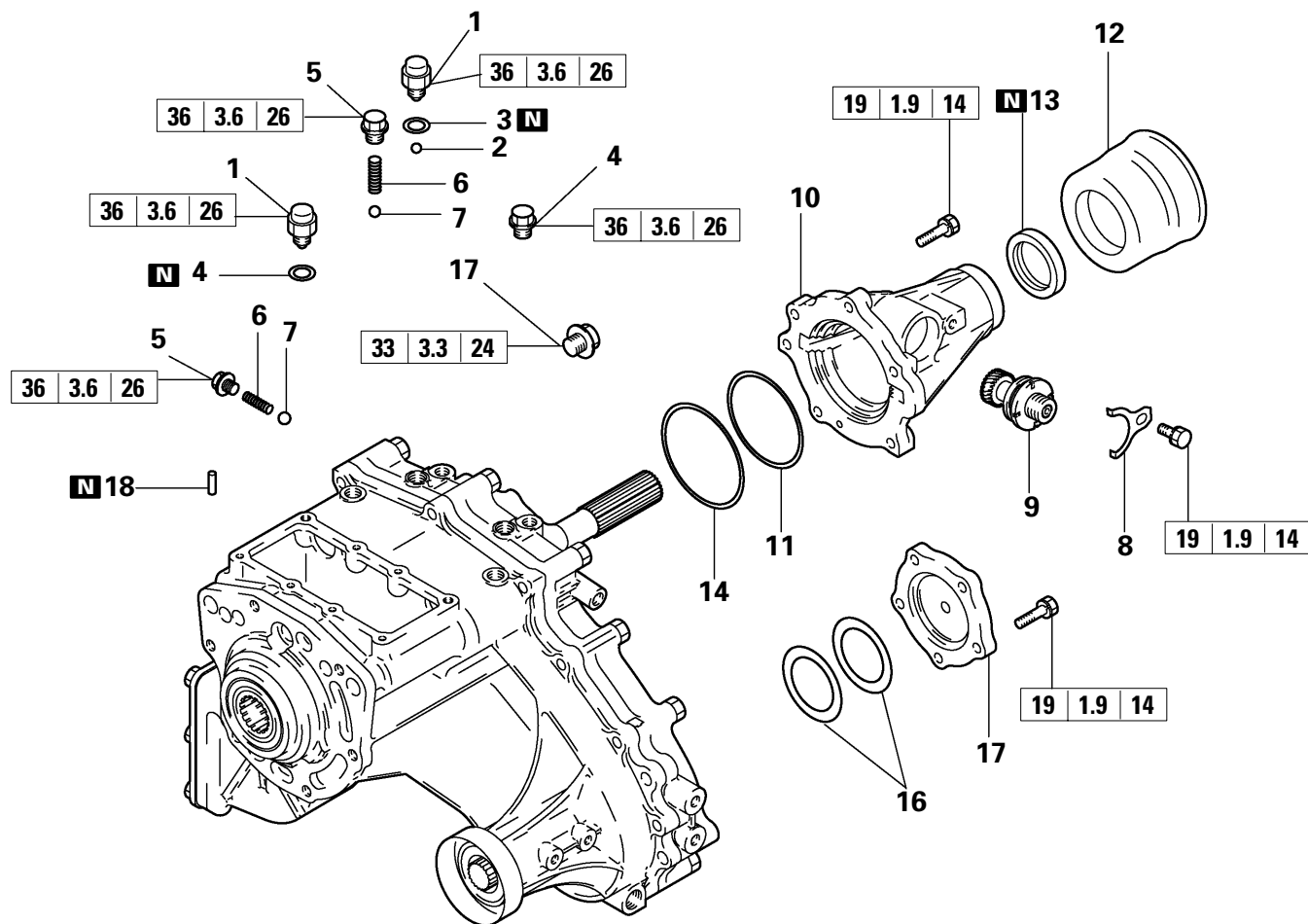
- | | |
|---------------------------|-------------------------------|
| 30. Snap ring | 44. Spring retainer |
| ▶M▶31. Chain cover | 45. Spring |
| ▶L▶32. Chain cover gasket | ▶d▶46. Spring pin |
| 33. Oil guide | 47. 2-4WD shift rail |
| 34. Side cover | 48. Distance piece |
| 35. Side cover gasket | 49. 2-4WD shift lug |
| 36. Lock plate | ◊C◊ ▶H▶50. Rear output shaft |
| 37. Counter gear shaft | ◊C◊ ▶H▶51. Chain |
| 38. O-ring | ◊C◊ ▶H▶52. Front output shaft |
| 39. Counter gear | 53. 2-4WD shift fork |
| ▶F▶40. Thrust washer | 54. H-L shift fork |
| 41. Needle bearing | 55. H-L clutch sleeve |
| 42. Bearing spacer | 56. Needle bearing |
| 43. Snap ring | |

V5MT1-1, 2

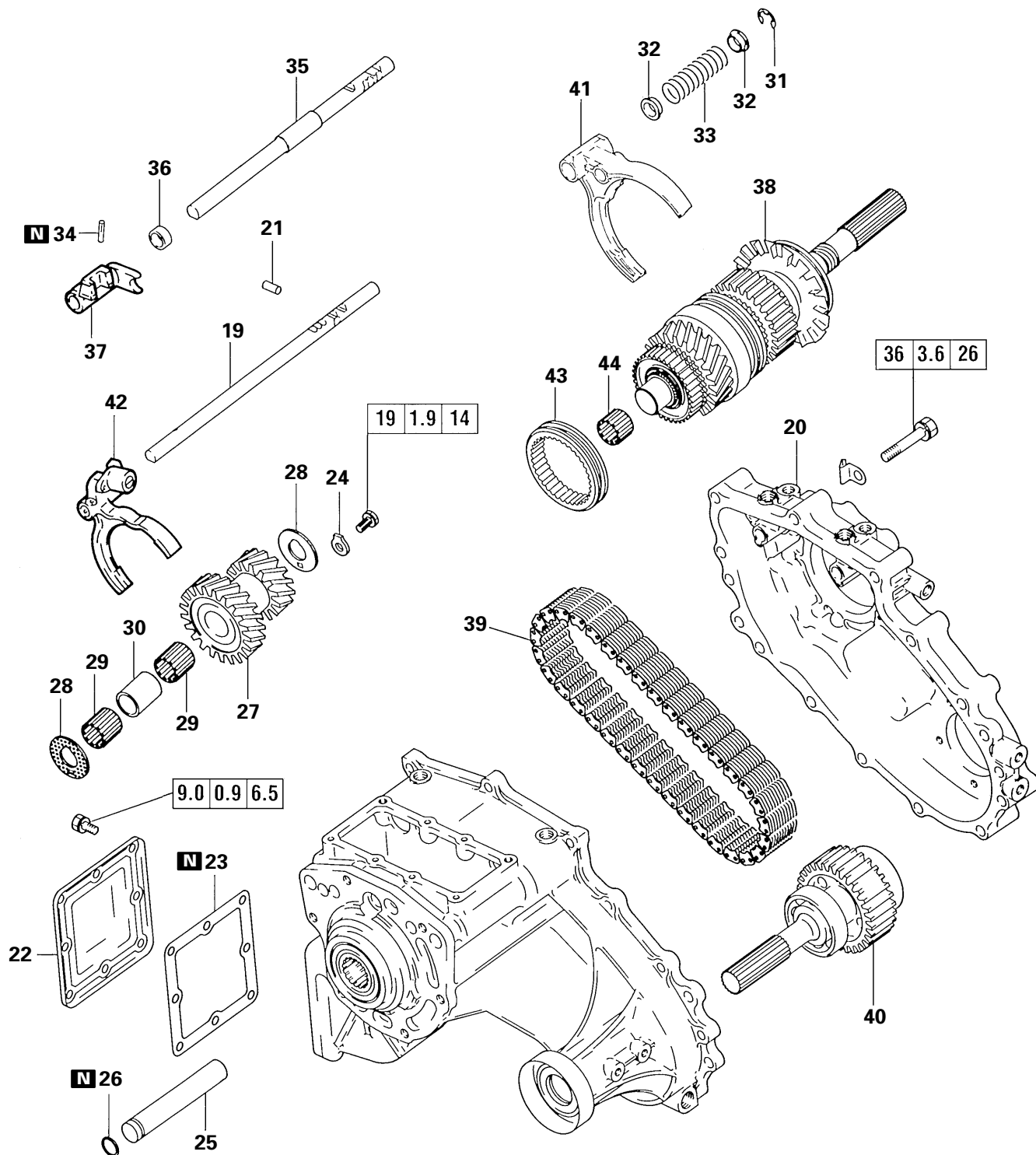
**Disassembly steps**

- ◆E◆ 57. Snap ring
- 58. Input gear assembly
- ◆B◆ 59. Oil seal (Input gear)
- 60. Baffle plate
- 61. Dust seal guide
- ◆A◆ 62. Oil seal (Front output shaft)
- 63. Transfer case

145084

V5MT1-3, 6 (PART TIME TYPE – LHD)**Disassembly steps**

- ◆b◆ 1. Detection switch
- 2. Steel ball
- 3. Gasket
- ◆a◆ 4. Plug
- ◆Z◆ 5. Poppet plug
- 6. Poppet spring
- 7. Steel ball
- 8. Sleeve clamp
- ◆Y◆ 9. Speedometer gear
- ◆X◆ 10. Rear cover
- ◆V◆ 11. Spacer
- 12. Dust seal guard
- ◆U◆ 13. Oil seal
- 14. Snap ring
- ◆Q◆ 15. Cover
- ◆Q◆ 16. Wave spring
- 17. H-L shift rail plug
- ◆P◆ 18. Spring pin for H-L shift fork

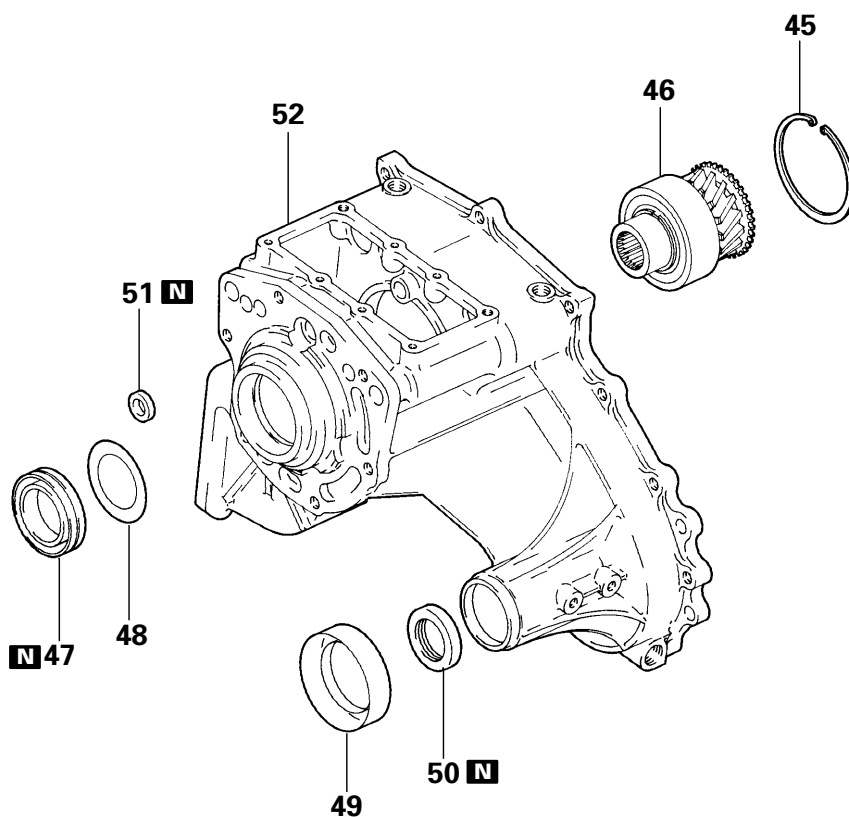
V5MT1-3, 6 (PART TIME TYPE – LHD)**Disassembly steps**

- ◀B▶▶P▶ 19. H-L shift rail
- ◀B▶▶N▶ 20. Chain cover
- ▶N▶ 21. Interlock plunger
- 22. Side cover
- 23. Side cover gasket
- 24. Lock plate
- ◀D▶▶G▶ 25. Counter gear shaft
- 26. O-ring
- 27. Counter gear

- ▶F▶ 28. Thrust washer
- 29. Needle bearing
- 30. Bearing spacer
- 31. Snap ring for 2-4WD shift rail
- 32. Spring retainer
- 33. Spring
- ▶d▶ 34. Spring pin for 2-4WD shift lug
- 35. 2-4WD shift rail
- 36. Distance piece

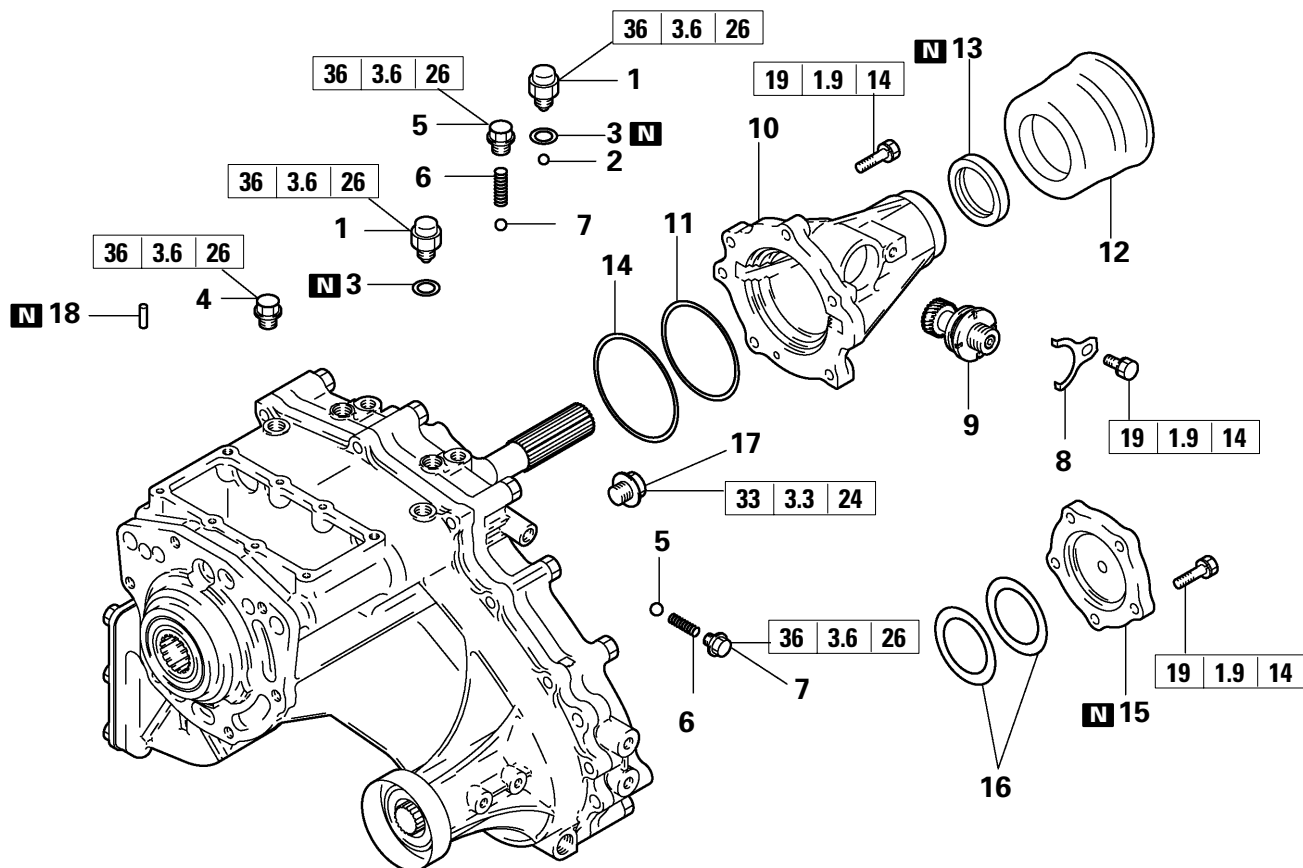
- 37. 2-4WD shift lug
- ◀C▶▶H▶ 38. Rear output shaft
- ◀C▶▶H▶ 39. Chain
- ◀C▶▶H▶ 40. Front output shaft
- 41. 2-4WD shift fork
- 42. H-L shift fork
- 43. H-L clutch sleeve
- 44. Needle bearing

TRM0280

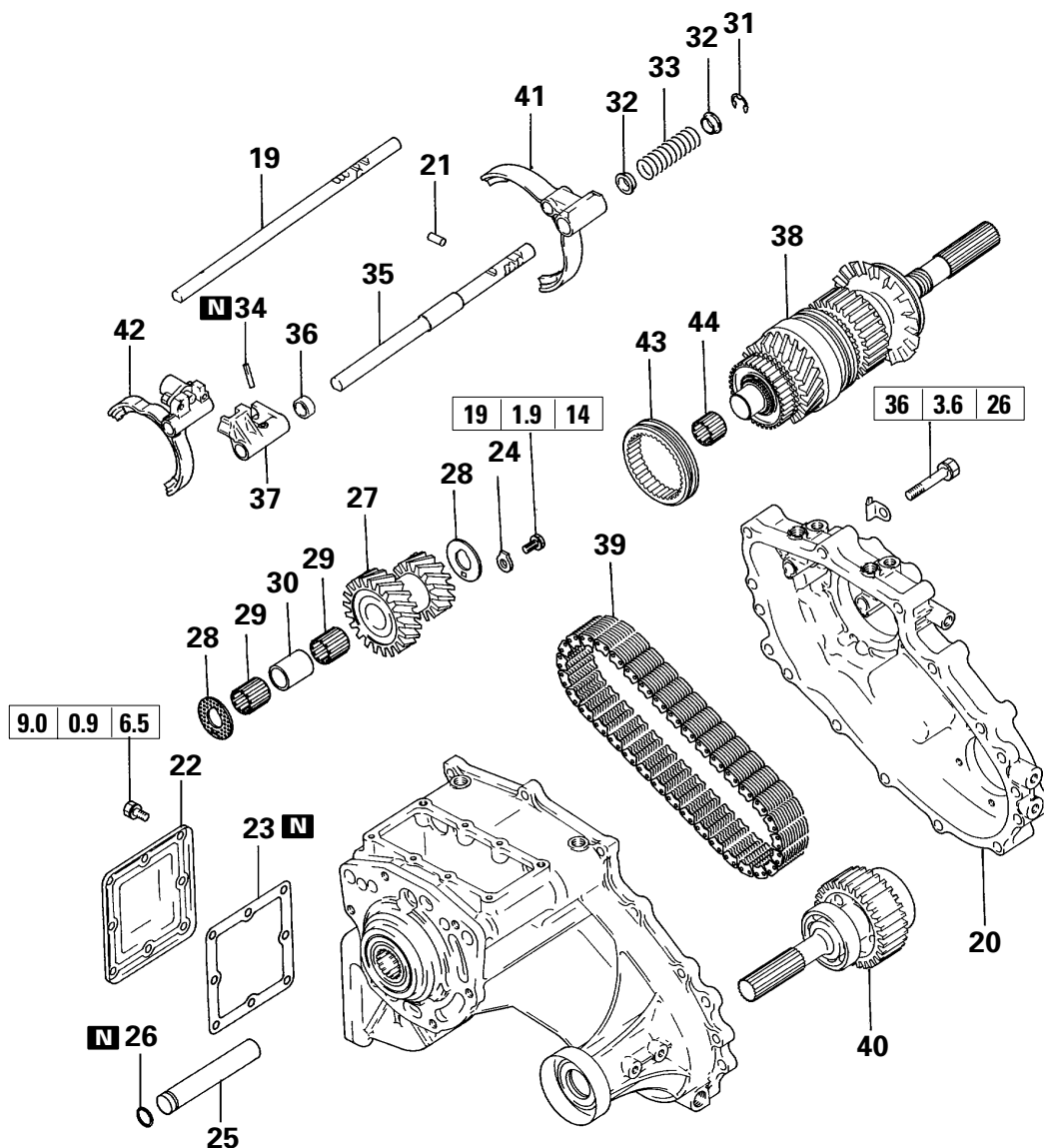
V5MT1-3, 6 (PART TIME TYPE – LHD)**Disassembly steps**

- ▶E▶ 45. Snap ring
- ▶ 46. Input gear
- ▶B▶ 47. Oil seal (Input gear)
- ▶ 48. Baffle plate
- ▶ 49. Dust seal guard
- ▶A▶ 50. Oil seal (Front output shaft)
- ▶C▶ 51. Oil seal
- ▶ 52. Transfer case

TRM0221

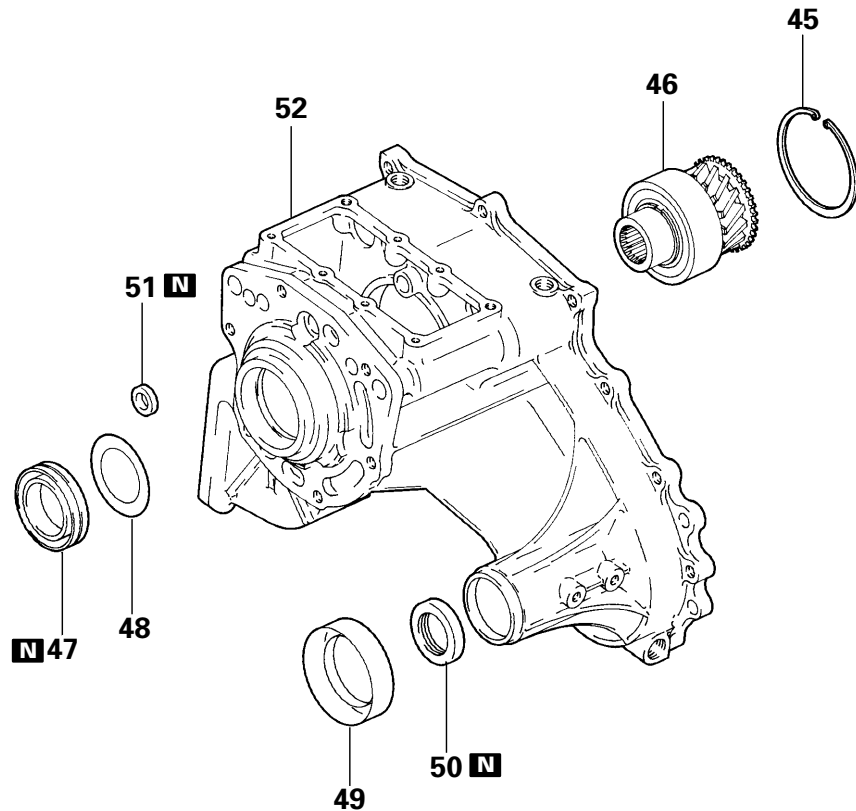
V5MT1-3, 6 (PART TIME TYPE – RHD)**Disassembly steps**

- ▣b 1. Detection switch
- 2. Steel ball
- 3. Gasket
- ▣a 4. Plug
- ▣Z 5. Poppet plug
- 6. Poppet spring
- 7. Steel ball
- 8. Sleeve clamp
- ▣Y 9. Speedometer gear
- ▣X 10. Rear cover
- ▣V 11. Spacer
- 12. Dust seal guard
- ▣U 13. Oil seal
- 14. Snap ring
- ▣Q 15. Cover
- ▣Q 16. Wave spring
- 17. H-L shift rail plug
- ▣P 18. Spring pin for H-L shift fork

V5MT1-3, 6 (PART TIME TYPE – RHD)**Disassembly steps**

- | | |
|------------------------------------|--|
| ◊B◊ ▶P◊ 19. H-L shift rail | 32. Spring retainer |
| ◊B◊ ▶N◊ 20. Chain cover | 33. Spring |
| ▶N◊ 21. Interlock plunger | ▶d◊ 34. Spring pin for 2-4WD shift lug |
| 22. Side cover | 35. 2-4WD shift rail |
| 23. Side cover gasket | 36. Distance piece |
| 24. Lock plate | 37. 2-4WD shift lug |
| ◊D◊ ▶G◊ 25. Counter gear shaft | ◊C◊ ▶H◊ 38. Rear output shaft |
| 26. O-ring | ◊C◊ ▶H◊ 39. Chain |
| 27. Counter gear | ◊C◊ ▶H◊ 40. Front output shaft |
| ▶F◊ 28. Thrust washer | 41. 2-4WD shift fork |
| 29. Needle bearing | 42. H-L shift fork |
| 30. Bearing spacer | 43. H-L clutch sleeve |
| 31. Snap ring for 2-4WD shift rail | 44. Needle bearing |

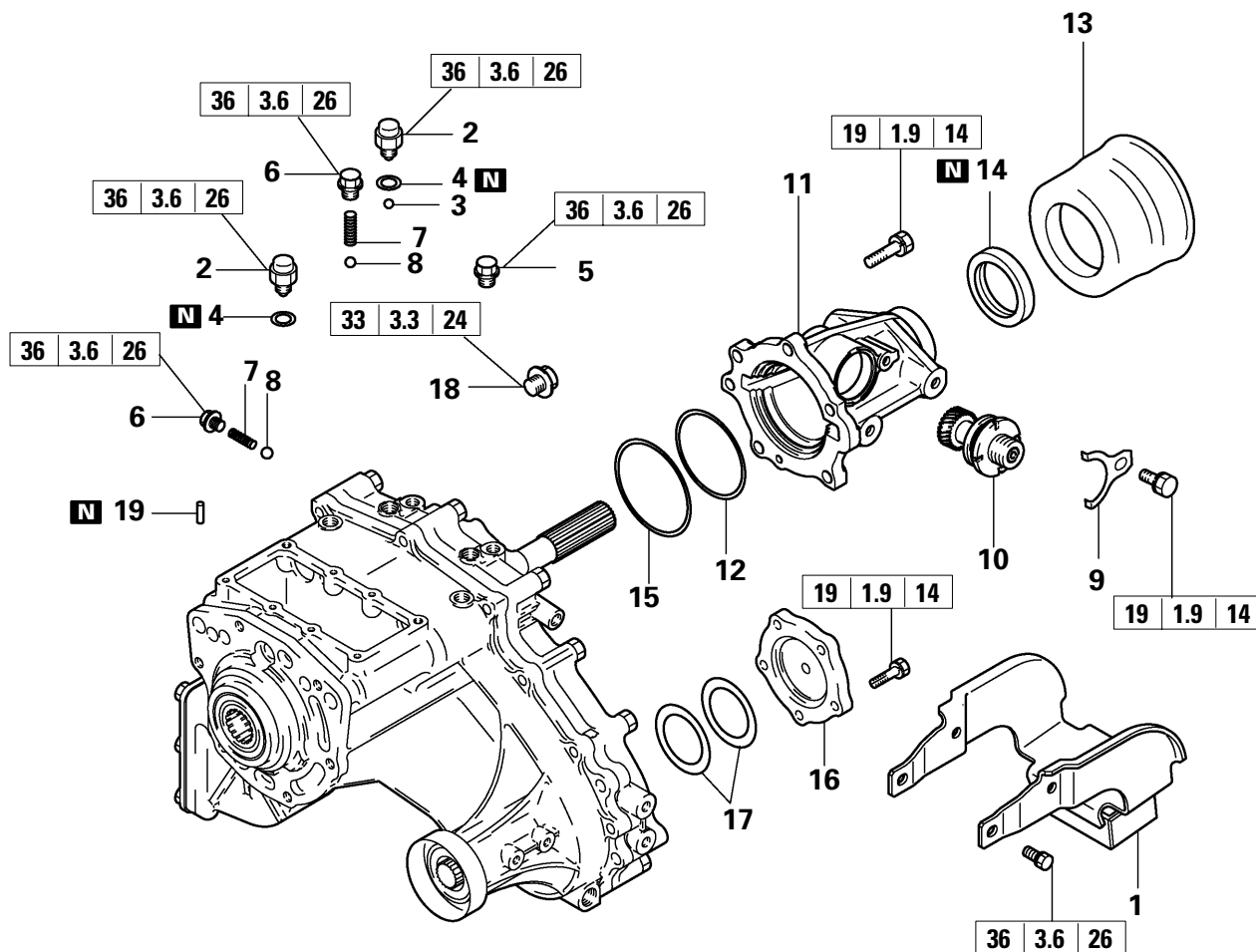
TRM0224

V5MT1-3, 6 (PART TIME TYPE – RHD)**Disassembly steps**

- ▶E▶ 45. Snap ring
- ▶▶▶ 46. Input gear
- ▶B▶ 47. Oil seal (Input gear)
- ▶▶▶ 48. Baffle plate
- ▶▶▶ 49. Dust seal guard
- ▶A▶ 50. Oil seal (Front output shaft)
- ▶C▶ 51. Oil seal
- ▶▶▶ 52. Transfer case

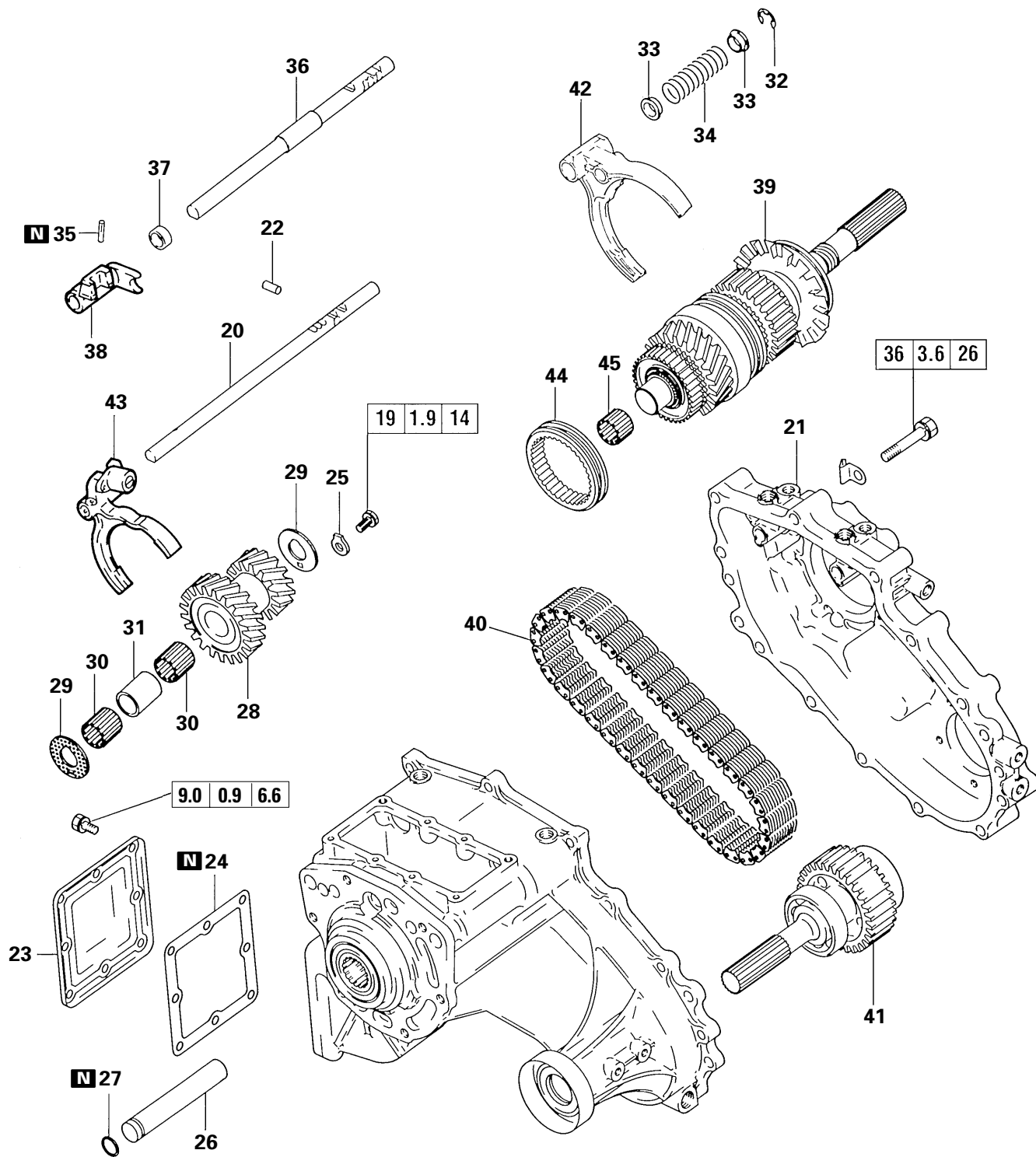
TRM0221

V5MT1-4, B, D (PART TIME TYPE – LHD)



Disassembly steps

- 1. Dynamic damper
- ♦b♦ 2. Detection switch
- 3. Steel ball
- 4. Gasket
- ♦a♦ 5. Plug
- ♦Z♦ 6. Poppet plug
- 7. Poppet spring
- 8. Steel ball
- 9. Sleeve clamp
- ♦Y♦ 10. Speedometer gear
- ♦X♦ 11. Rear cover
- ♦V♦ 12. Spacer
- 13. Dust seal guard
- ♦U♦ 14. Oil seal
- 15. Snap ring
- ♦Q♦ 16. Cover
- ♦Q♦ 17. Wave spring
- 18. H-L shift rail plug
- ♦P♦ 19. Spring pin for H-L shift fork

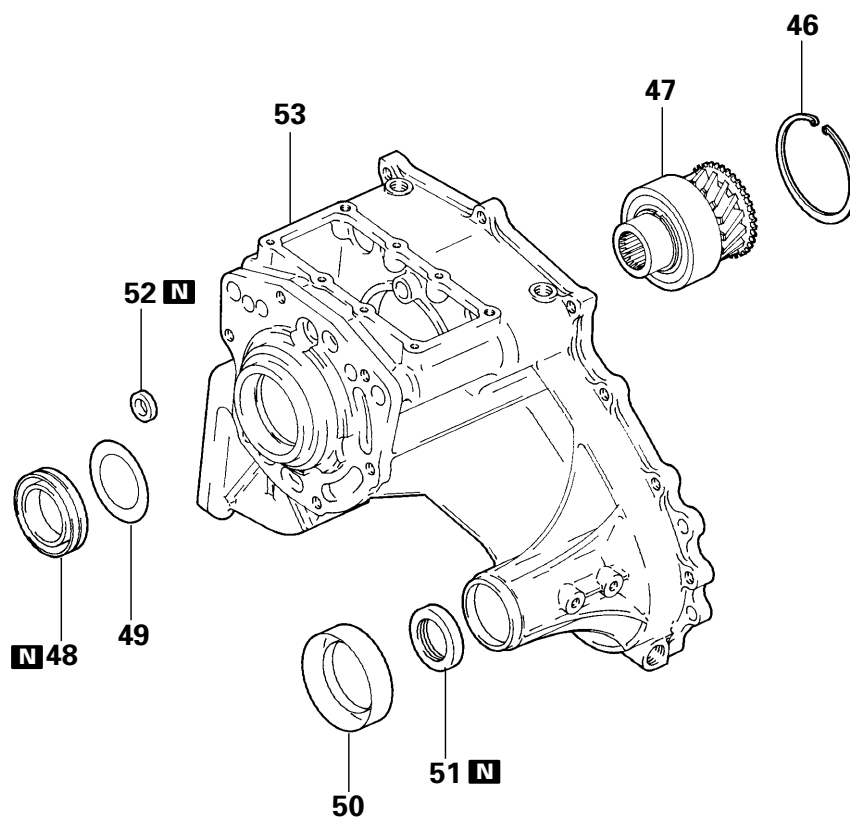
V5MT1-4, B, D (PART TIME TYPE – LHD)**Disassembly steps**

- ◀B▶ ▶P▶ 20. H-L shift rail
- ◀B▶ ▶N▶ 21. Chain cover
- ▶N▶ 22. Interlock plunger
- 23. Side cover
- 24. Side cover gasket
- 25. Lock plate
- ◀D▶ ▶G▶ 26. Counter gear shaft
- 27. O-ring
- 28. Counter gear

- ▶F▶ 29. Thrust washer
- 30. Needle bearing
- 31. Bearing spacer
- 32. Snap ring for 2-4WD shift rail
- 33. Spring retainer
- 34. Spring
- ▶d▶ 35. Spring pin for 2-4WD shift lug
- 36. 2-4WD shift rail
- 37. Distance piece

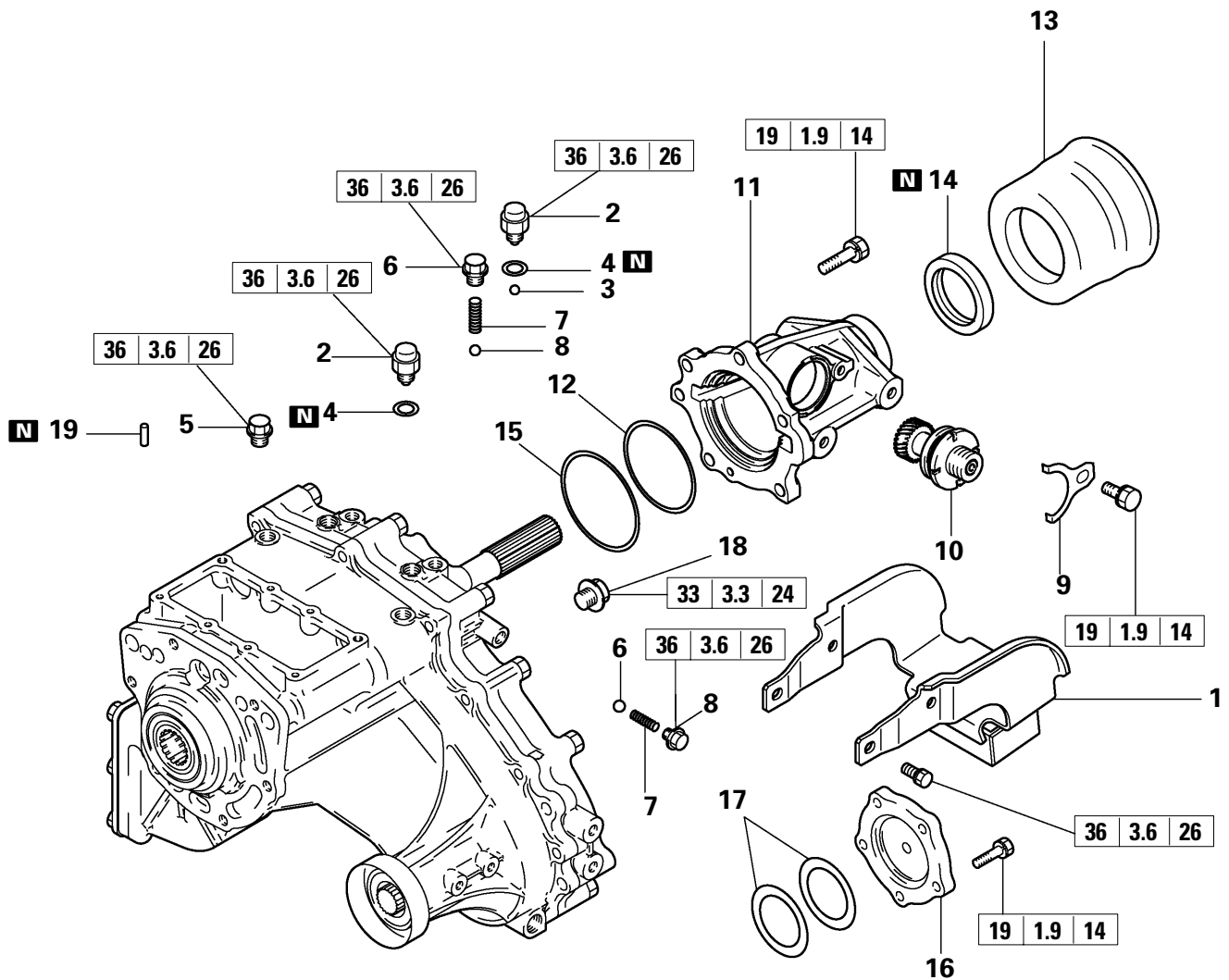
- 38. 2-4WD shift lug
- ◀C▶ ▶H▶ 39. Rear output shaft
- ◀C▶ ▶H▶ 40. Chain
- ◀C▶ ▶H▶ 41. Front output shaft
- 42. 2-4WD shift fork
- 43. H-L shift fork
- 44. H-L clutch sleeve
- 45. Needle bearing

TRM0280

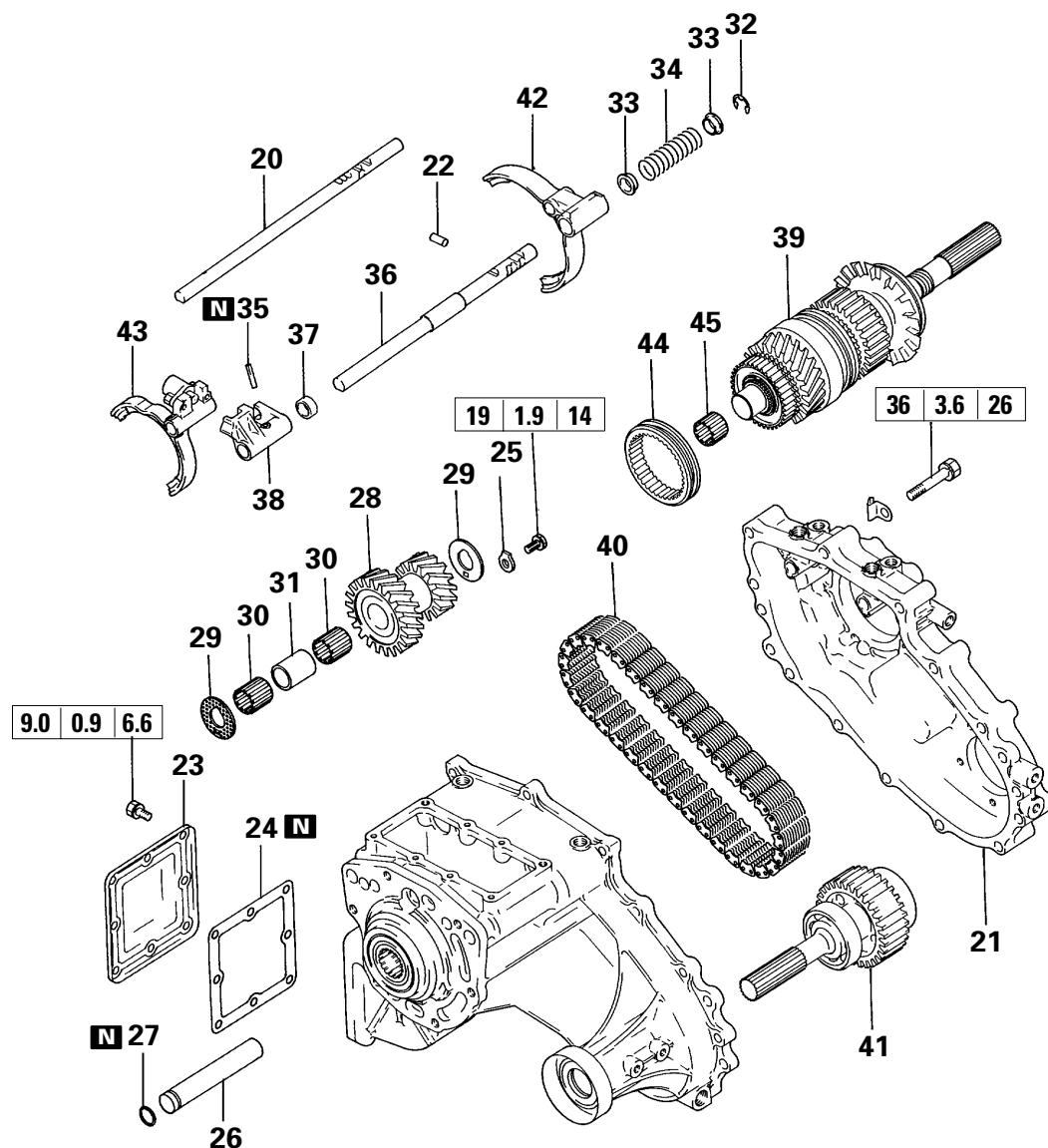
V5MT1-4, B, D (PART TIME TYPE – LHD)**Disassembly steps**

- ▶E▶ 46. Snap ring
- ▶ 47. Input gear
- ▶B▶ 48. Oil seal (Input gear)
- ▶ 49. Baffle plate
- ▶ 50. Dust seal guard
- ▶A▶ 51. Oil seal (Front output shaft)
- ▶C▶ 52. Oil seal
- ▶ 53. Transfer case

TRM0221

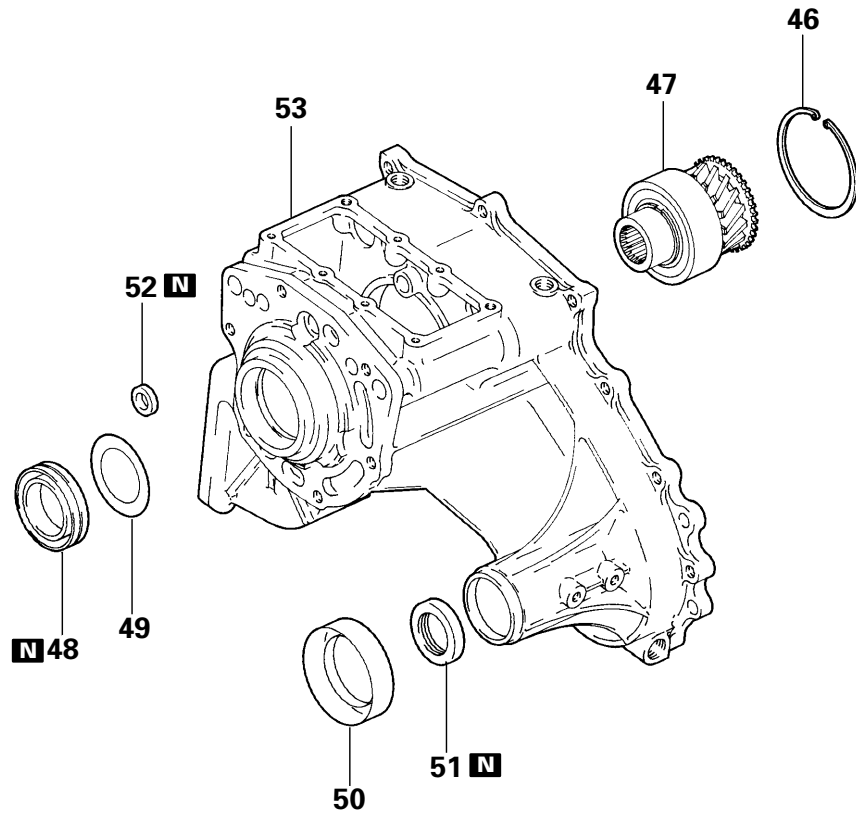
V5MT1-4, B, D (PART TIME TYPE – RHD)**Disassembly steps**

1. Dynamic damper
- ▶b▶ 2. Detection switch
3. Steel ball
4. Gasket
- ▶a▶ 5. Plug
- ▶Z▶ 6. Poppet plug
7. Poppet spring
8. Steel ball
9. Sleeve clamp
- ▶Y▶ 10. Speedometer gear
- ▶X▶ 11. Rear cover
- ▶V▶ 12. Spacer
13. Dust seal guard
- ▶U▶ 14. Oil seal
15. Snap ring
- ▶Q▶ 16. Cover
- ▶Q▶ 17. Wave spring
18. H-L shift rail plug
- ▶P▶ 19. Spring pin for H-L shift fork

V5MT1-4, B, D (PART TIME TYPE – RHD)**Disassembly steps**

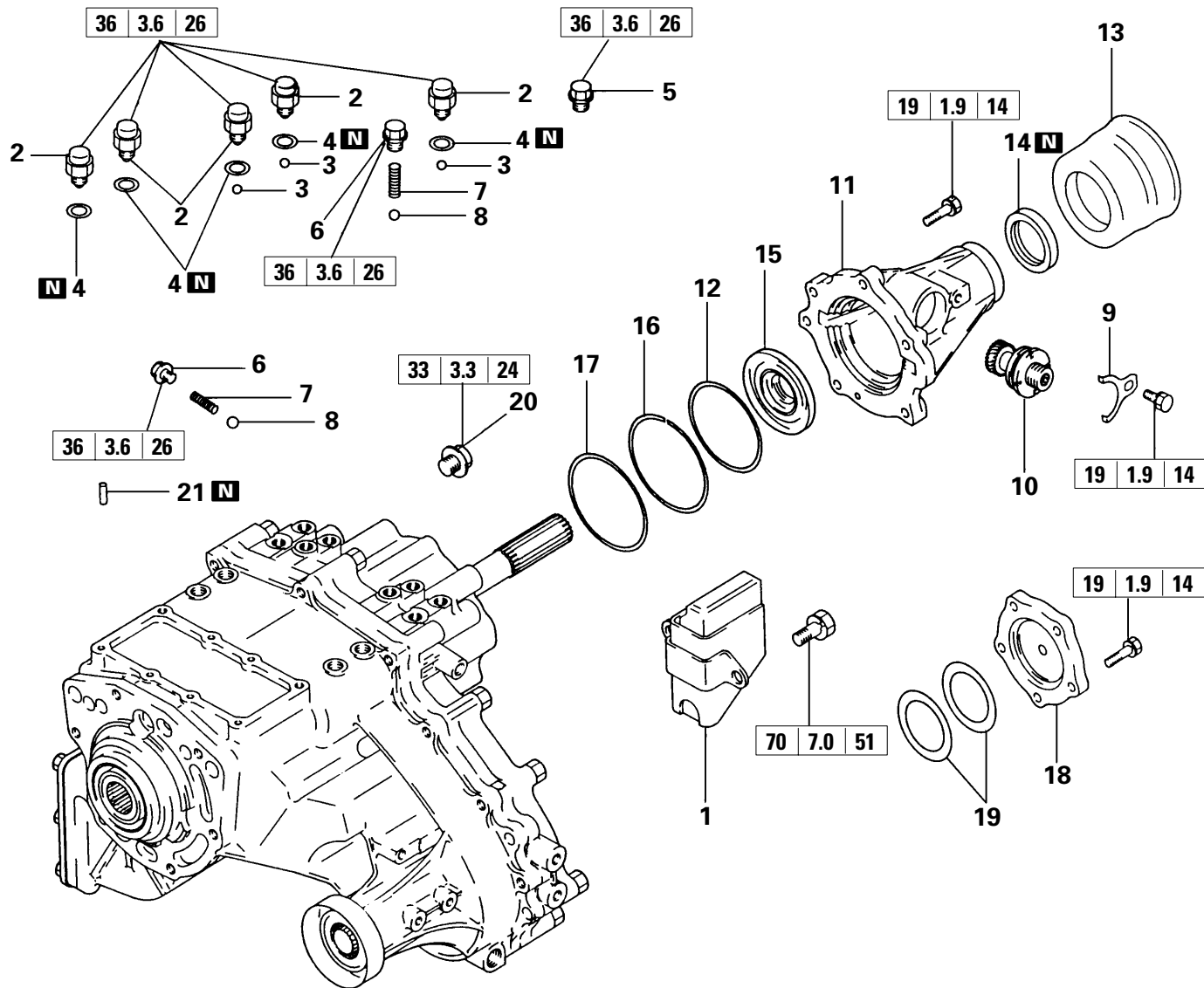
- | | | | |
|--------|------------------------------------|---------------------|------------------------------------|
| ◊B◊▶P◊ | 20. H-L shift rail | 33. Spring retainer | |
| ◊B◊▶N◊ | 21. Chain cover | 34. Spring | |
| ▶N◊ | 22. Interlock plunger | ▶d◊ | 35. Spring pin for 2-4WD shift lug |
| | 23. Side cover | | 36. 2-4WD shift rail |
| | 24. Side cover gasket | | 37. Distance piece |
| | 25. Lock plate | | 38. 2-4WD shift lug |
| ◊D◊▶G◊ | 26. Counter gear shaft | ◊C◊▶H◊ | 39. Rear output shaft |
| | 27. O-ring | ◊C◊▶H◊ | 40. Chain |
| | 28. Counter gear | ◊C◊▶H◊ | 41. Front output shaft |
| ▶F◊ | 29. Thrust washer | | 42. 2-4WD shift fork |
| | 30. Needle bearing | | 43. H-L shift fork |
| | 31. Bearing spacer | | 44. H-L clutch sleeve |
| | 32. Snap ring for 2-4WD shift rail | | 45. Needle bearing |

TRM0224

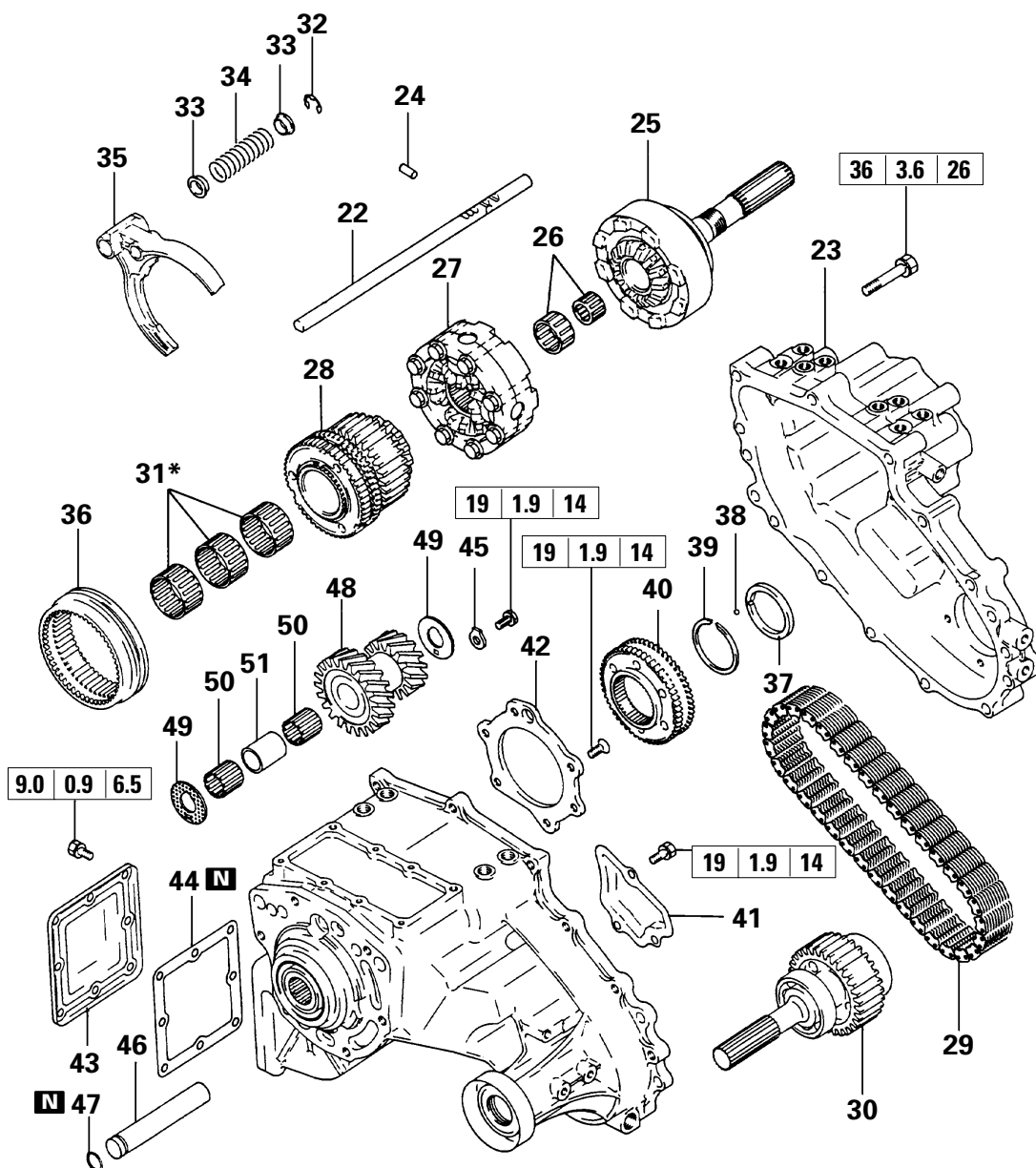
V5MT1-4, B, D (PART TIME TYPE – RHD)**Disassembly steps**

- ▶E▶ 46. Snap ring
- ▶ 47. Input gear
- ▶B▶ 48. Oil seal (Input gear)
- ▶ 49. Baffle plate
- ▶ 50. Dust seal guard
- ▶A▶ 51. Oil seal (Front output shaft)
- ▶C▶ 52. Oil seal
- ▶ 53. Transfer case

TRM0221

V5MT1-3, 4, 6 (SUPER SELECT TYPE – LHD)**Disassembly steps**

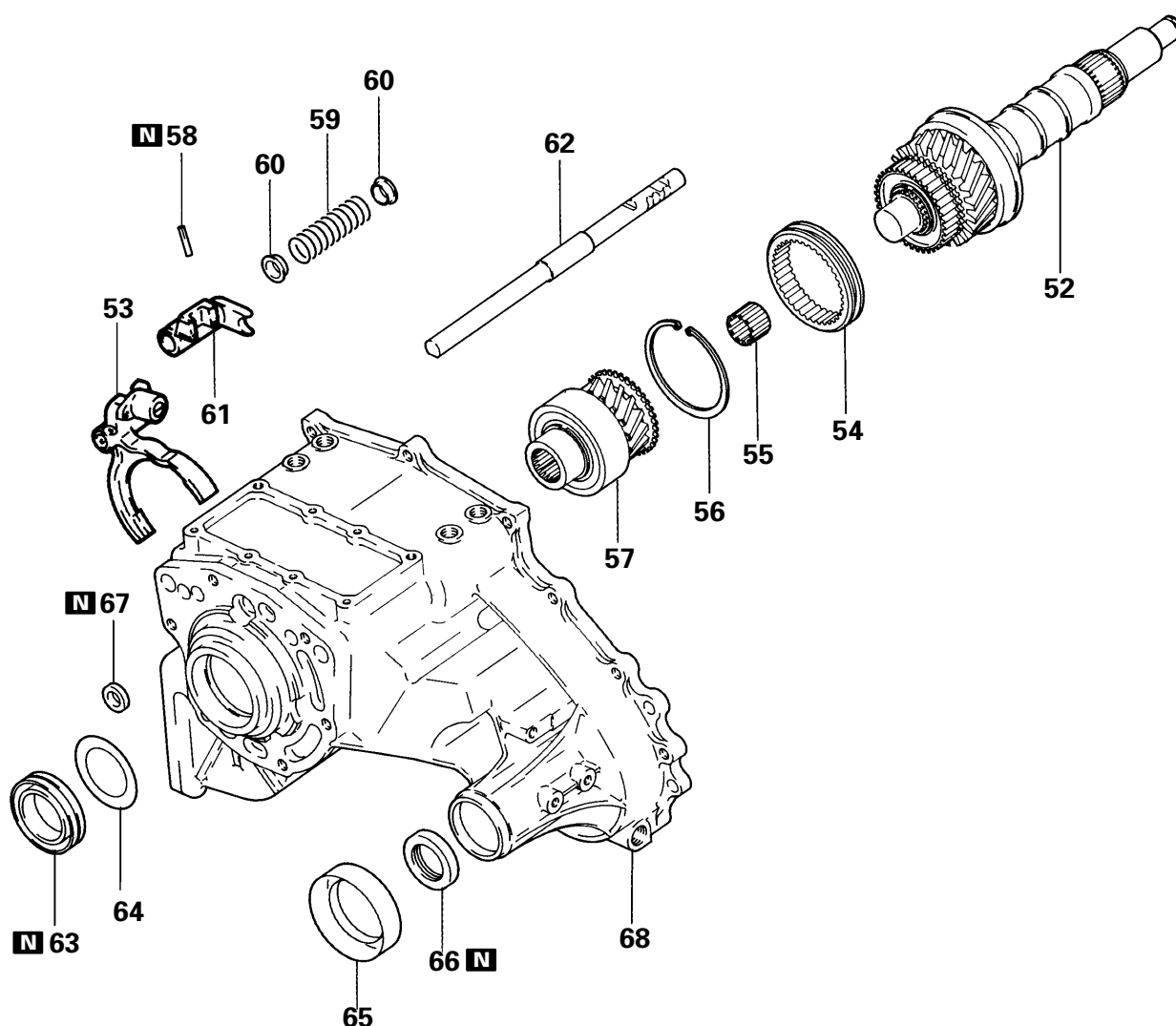
- 1. Dynamic damper <V5MT1-6-A>
- ◆c 2. Detection switch
- 3. Steel ball
- 4. Gasket
- ◆a 5. Plug
- ◆Z 6. Poppet plug
- 7. Poppet spring
- 8. Steel ball
- 9. Sleeve clamp
- ◆Y 10. Speedometer gear
- ◆X 11. Rear cover
- ◆V 12. Spacer
- 13. Dust seal guard
- ◆U 14. Oil seal
- ◆T 15. Oil seal
- ◆S 16. Snap ring <Up to Nov. 1992>
- ◆S 17. Spacer <Up to Nov. 1992>
- ◆Q 18. Cover
- ◆Q 19. Wave spring (Spacer)
- 20. H-L shift rail plug
- ◆P 21. Spring pin for H-L shift fork

V5MT1-3, 4, 6 (SUPER SELECT TYPE – LHD)**Disassembly steps**

- ◊B◊ ◊P◊ 22. H-L shift rail
- ◊B◊ ◊N◊ 23. Chain cover
- ◊N◊ 24. Interlock plunger
- 25. Rear output shaft assembly
- 26. Needle bearing
- 27. Center differential case assembly
- ◊F◊ ◊K◊ 28. 2-4WD synchronizer assembly
- ◊F◊ ◊K◊ 29. Chain
- ◊F◊ ◊K◊ 30. Front output shaft
- 31. Needle bearing
- 32. Snap ring for 2-4WD shift rail
- 33. Spring seat
- 34. Spring
- 35. 2-4WD shift fork
- 36. 2-4WD synchronizer sleeve
- 37. Sleeve
- 38. Steel ball
- ◊J◊ 39. Snap ring
- 40. Differential lock hub
- 41. Oil dam cover
- ◊I◊ 42. Bearing retainer
- 43. Side cover
- 44. Side cover gasket
- 45. Lock plate
- ◊D◊ ◊G◊ 46. Transfer counter gear shaft
- 47. O-ring
- 48. Transfer counter gear
- ◊F◊ 49. Thrust washer
- 50. Needle bearing
- 51. Bearing spacer

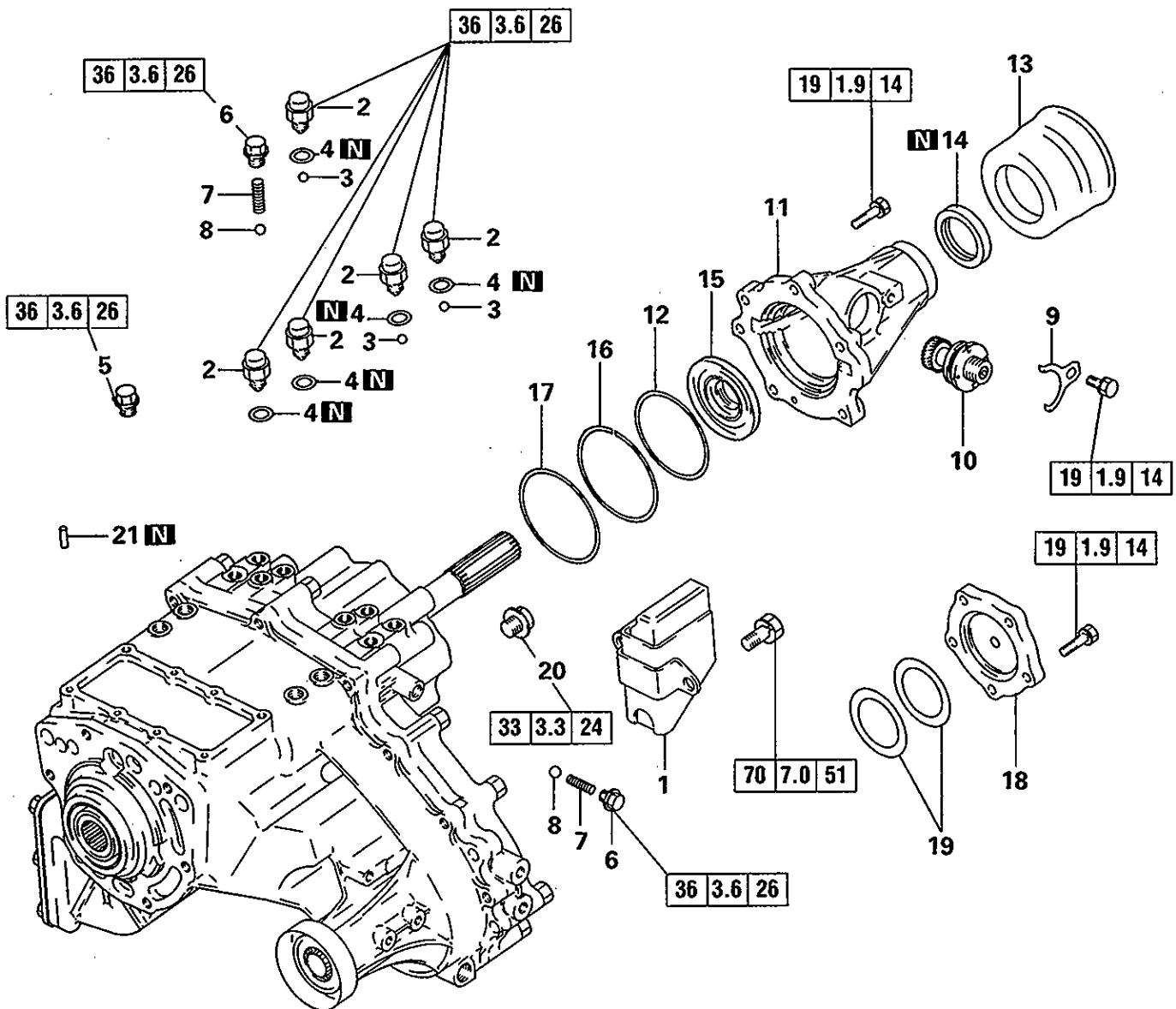
NOTE

*: One needle bearing disused. (From Dec. 1992)

V5MT1-3, 4, 6 (SUPER SELECT TYPE – LHD)**Disassembly steps**

- 52. Transfer drive shaft assembly
- 53. H-L shift fork assembly
- 54. H-L clutch sleeve
- 55. Needle bearing
- ◆E◆ 56. Snap ring
- 57. Transfer input gear assembly
- ◆E◆ ◆D◆ 58. Spring pin for 2-4WD shift lug
- ◆D◆ 59. Spring
- ◆D◆ 60. Spring retainer
- ◆D◆ 61. 2-4WD shift lug
- ◆D◆ 62. 2-4WD shift rail
- ◆B◆ 63. Oil seal
- 64. Baffle plate
- 65. Dust seal guard
- ◆A◆ 66. Oil seal
- ◆C◆ 67. Oil seal
- 68. Transfer case

V5MT1-3, 4, 6 (SUPER SELECT TYPE – RHD)

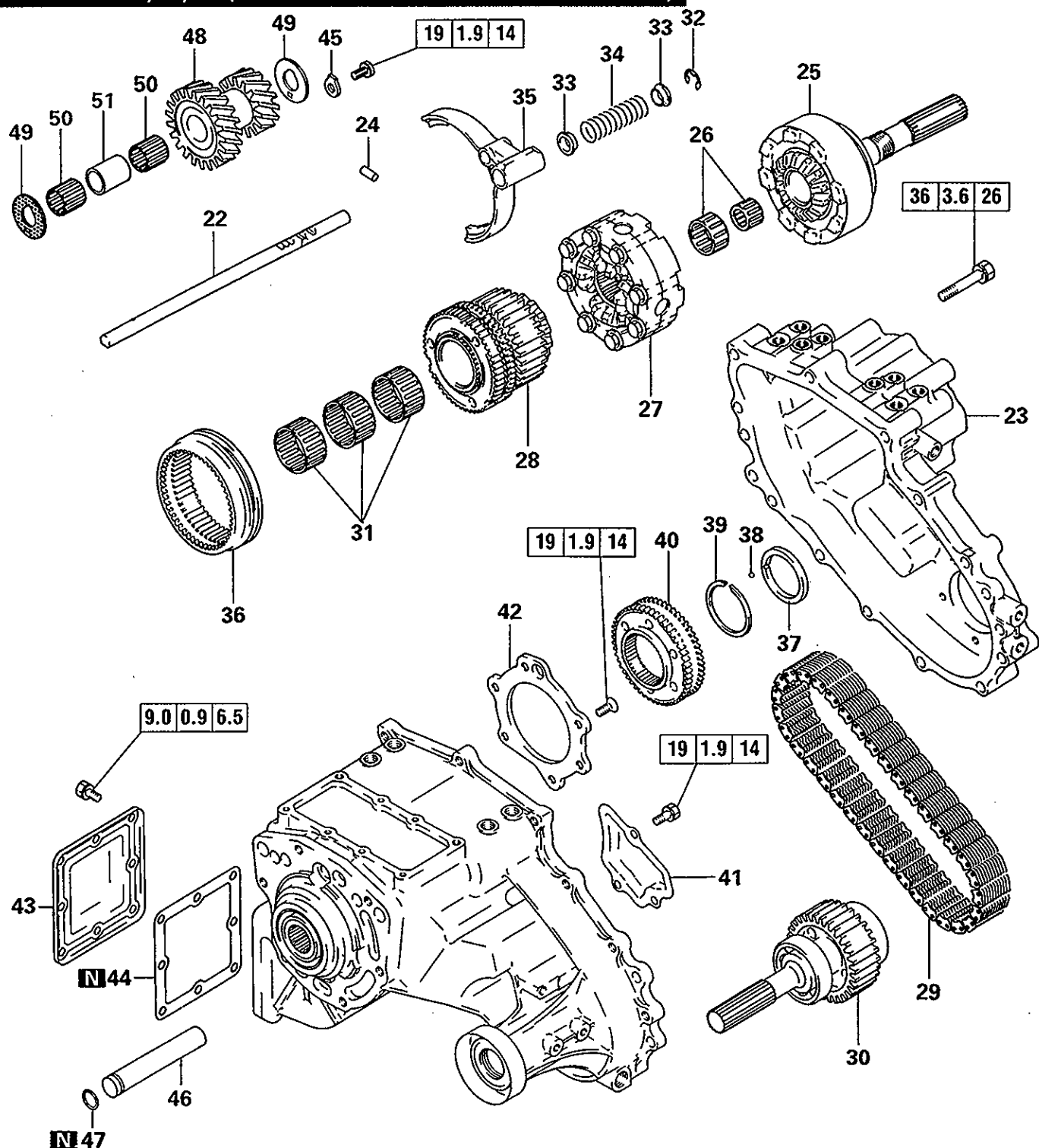


Disassembly steps

- 1. Dynamic damper <V5MT1-6-A>
- ◆c◆ 2. Detection switch
- 3. Steel ball
- 4. Gasket
- ◆a◆ 5. Plug
- ◆Z◆ 6. Poppet plug
- 7. Poppet spring
- 8. Steel ball
- 9. Sleeve clamp
- ◆Y◆ 10. Speedometer gear
- ◆X◆ 11. Rear cover

- ◆V◆ 12. Spacer
- 13. Dust seal guard
- ◆U◆ 14. Oil seal
- ◆T◆ 15. Oil seal
- ◆S◆ 16. Snap ring
- ◆S◆ 17. Spacer
- ◆Q◆ 18. Cover
- ◆Q◆ 19. Wave spring (Spacer)
- 20. H-L Shift rail plug
- ◆P◆ 21. Spring pin for H-L shift fork

V5MT1-3, 4, 6 (SUPER SELECT TYPE – RHD)



Disassembly steps

⚡B⚡P⚡22. H-L shift rail

⚡B⚡N⚡23. Chain cover

⚡N⚡24. Interlock plunger

25. Rear output shaft

26. Needle bearing

27. Center differential case

⚡F⚡⚡K⚡28. 2-4WD synchronizer

⚡F⚡⚡K⚡29. Chain

⚡F⚡⚡K⚡30. Front output shaft

31. Needle bearing

32. Snap ring for 2-4WD shift rail

33. Spring seat

34. Spring

35. 2-4WD shift fork

36. 2-4WD synchronizer sleeve

37. Sleeve

38. Steel ball

⚡J⚡39. Snap ring

40. Differential lock hub

41. Oil dam cover

⚡I⚡42. Bearing retainer

43. Side cover

44. Side cover gasket

45. Lock plate

⚡D⚡⚡G⚡46. Transfer counter gear shaft

47. O-ring

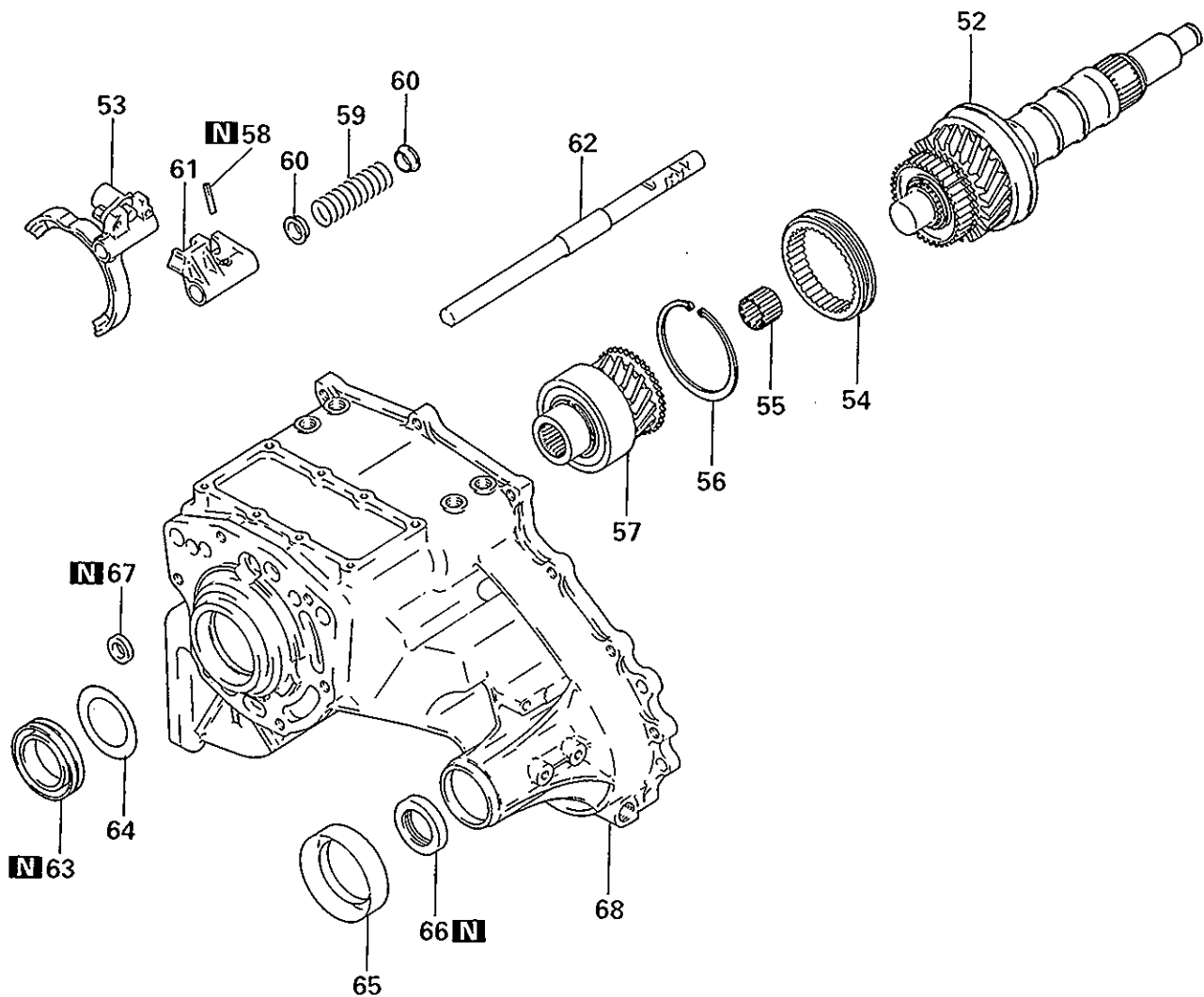
48. Transfer counter gear

⚡F⚡49. Thrust washer

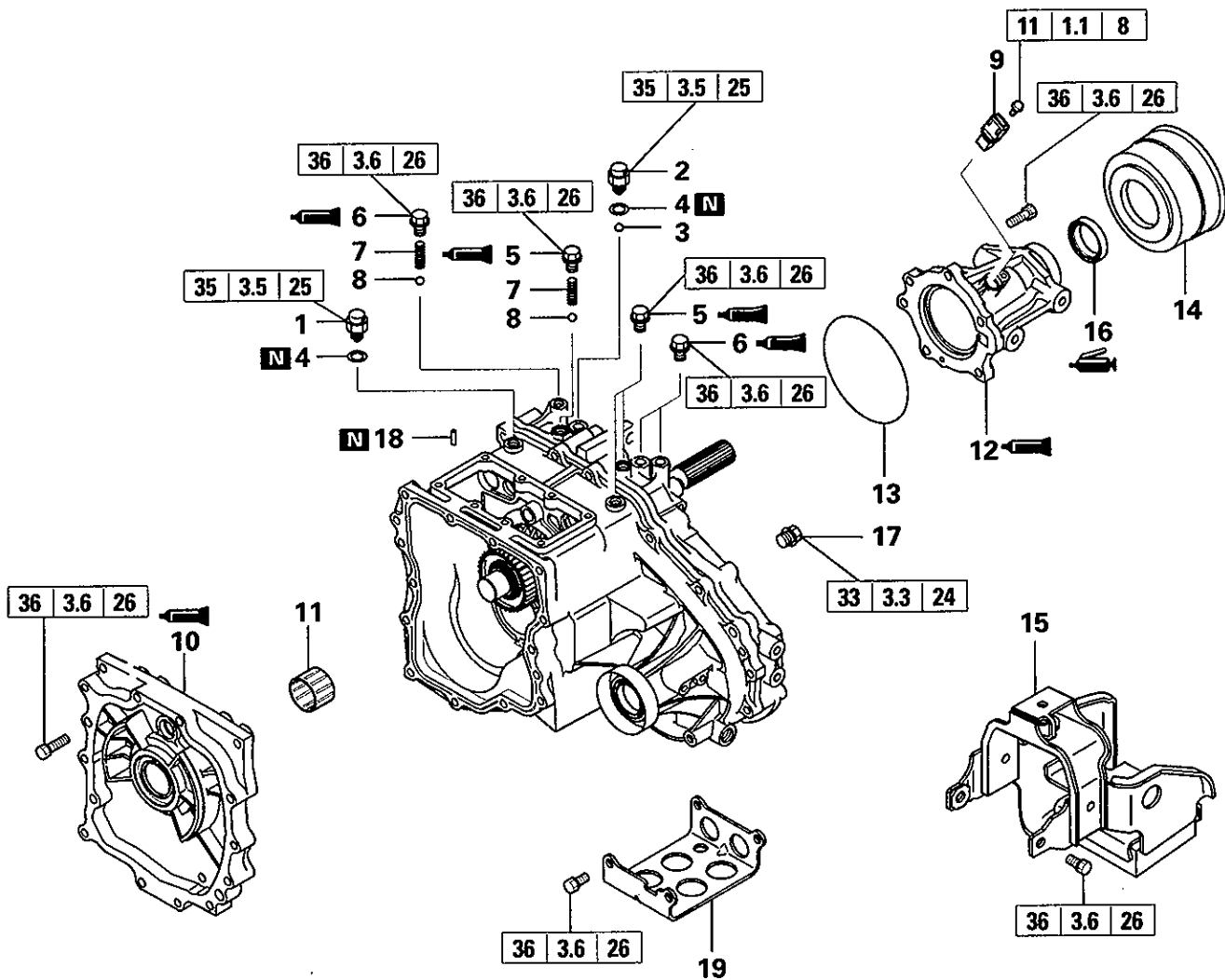
50. Needle bearing

51. Bearing spacer

TRM0222

V5MT1-3, 4, 6 (SUPER SELECT TYPE – RHD)**Disassembly steps**

- 52. Transfer drive shaft
- 53. H-L shift fork
- 54. H-L clutch sleeve
- 55. Needle bearing
- ◆E◆ 56. Snap ring
- 57. Transfer input gear
- ◆E◆ ◆D◆ 58. Spring pin for 2-4WD shift lug
- ◆D◆ 59. Spring
- ◆D◆ 60. Spring retainer
- ◆D◆ 61. 2-4WD shift lug
- ◆D◆ 62. 2-4WD shift rail
- ◆B◆ 63. Oil seal
- 64. Baffle plate
- 65. Dust seal guard
- ◆A◆ 66. Oil seal
- ◆C◆ 67. Oil seal
- 68. Transfer case

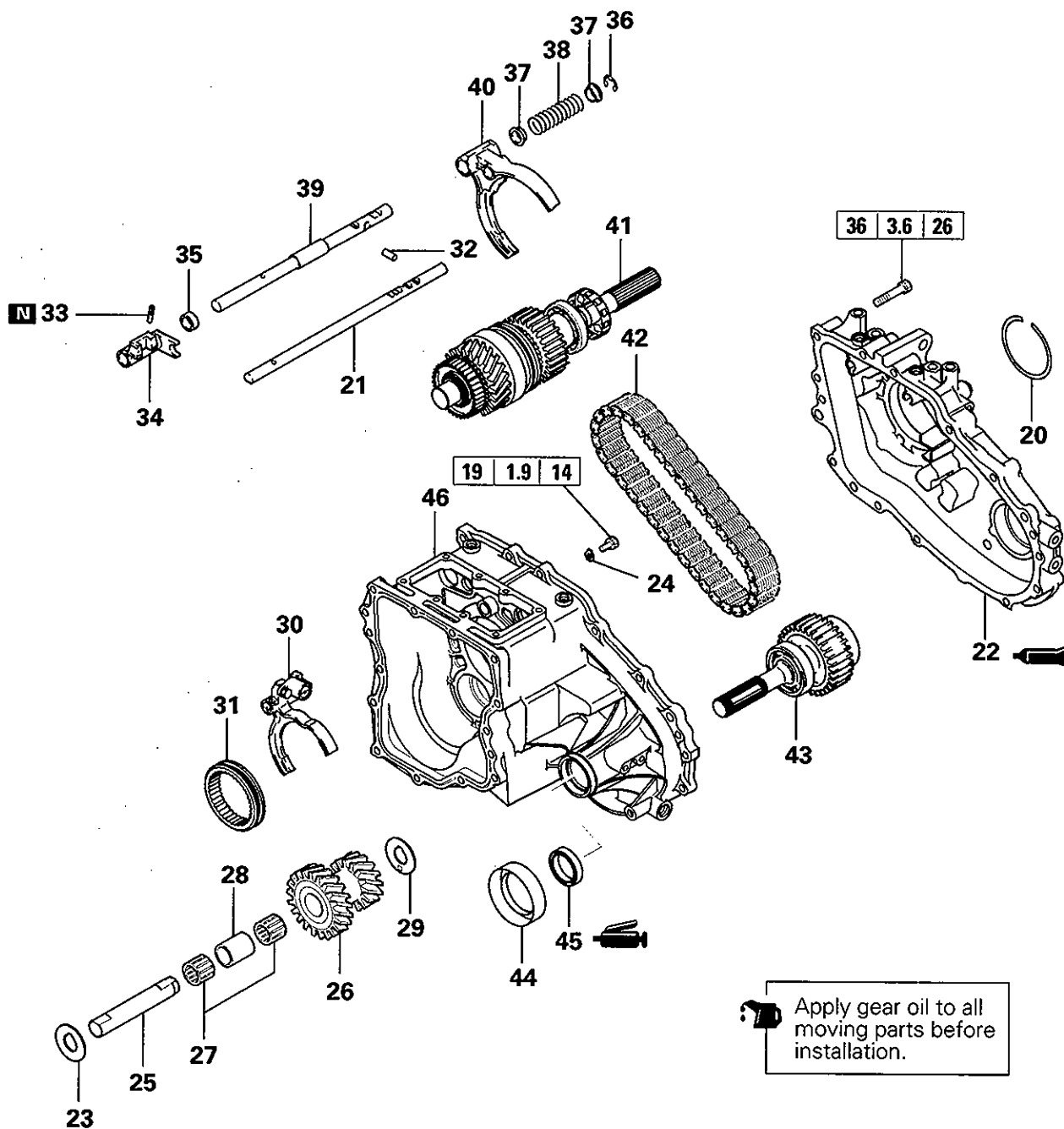
V5MT1-8 (PART TIME TYPE – LHD)

 Apply gear oil to all moving parts before installation.

Disassembly steps

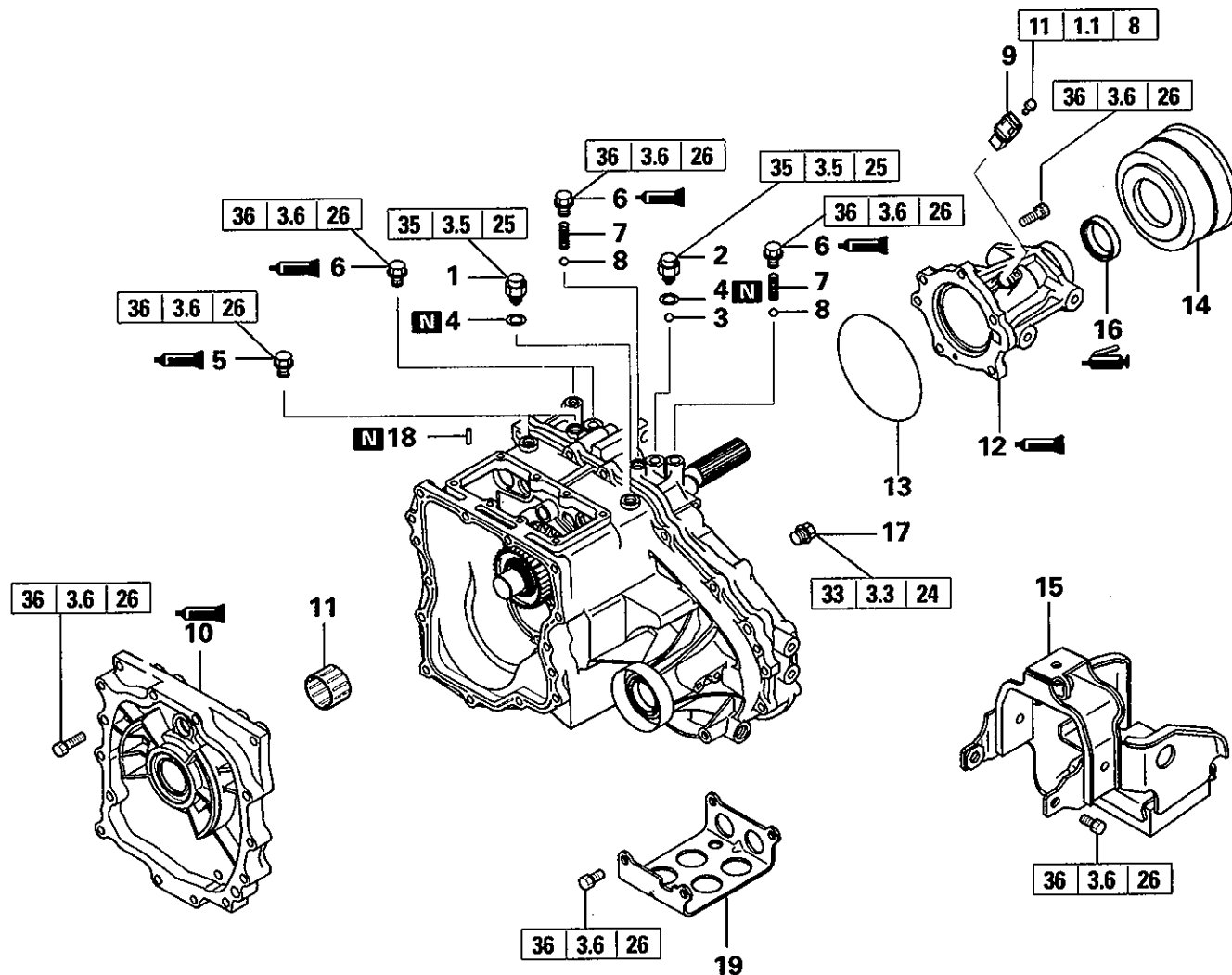
1. 4WD switch
2. Transfer switch
3. Steel ball
4. Gasket
5. Plug
6. Poppet plug
7. Poppet spring
8. Steel ball
9. Vehicle speed sensor
10. Transfer case plate

- 11. Needle bearing
- 12. Rear cover
- 13. Spacer
- 14. Dust seal guard
- 15. Dynamic damper
- 16. Oil seal
- 17. Plug
- 18. Spring pin (H-L shift fork)
- 19. Under guard <EXP>

V5MT1-8 (PART TIME TYPE – LHD)**Disassembly steps**

- 20. Snap ring
- ◊G◊▶P◊ 21. H-L shift rail
- ◊G◊▶N◊ 22. Chain cover
- 23. Thrust washer
- 24. Lock plate
- 25. Counter gear shaft
- 26. Counter gear
- 27. Needle bearing
- 28. Bearing spacer
- 29. Thrust washer
- 30. H-L shift fork
- 31. H-L clutch sleeve
- ▶N◊ 32. Interlock plunger
- ◊H◊▶d◊ 33. Spring pin (2-4WD shift lug)

- 34. 2-4WD shift lug
- 35. Distance piece
- 36. E-ring (2-4WD shift rail)
- 37. Spring seat
- 38. Spring
- 39. 2-4WD shift rail
- 40. 2-4WD shift fork
- ◊C◊▶H◊ 41. Rear output shaft
- ◊C◊▶H◊ 42. Chain
- ◊C◊▶H◊ 43. Front output shaft
- 44. Dust seal guard
- ▶A◊ 45. Oil seal
- 46. Transfer case

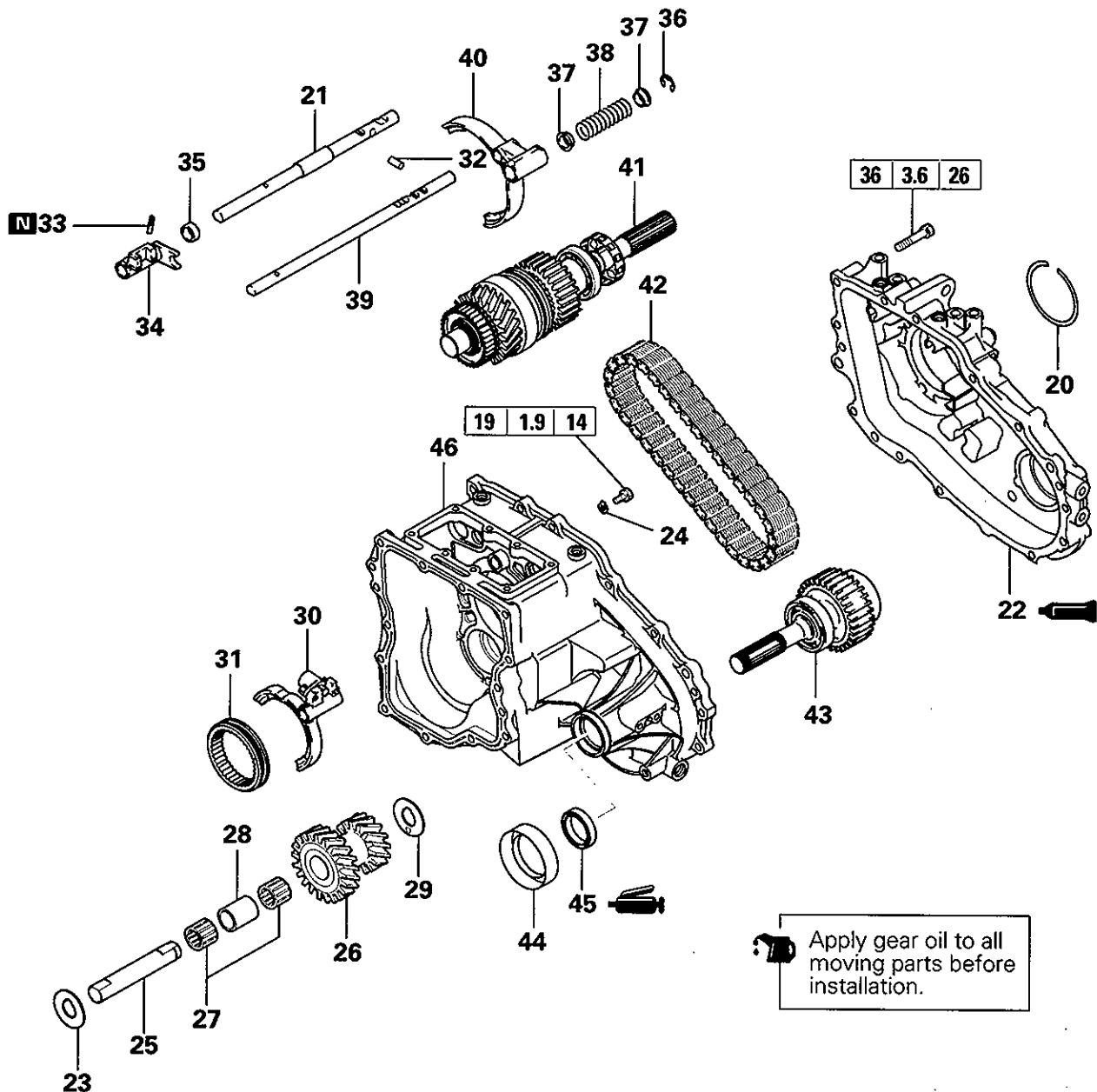
V5MT1-8 (PART TIME TYPE – RHD)

Apply gear oil to all moving parts before installation.

Disassembly steps

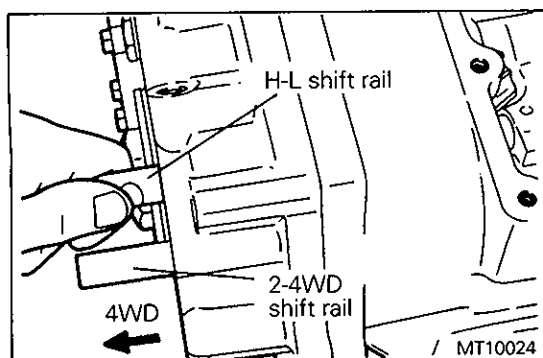
1. 4WD switch
2. Transfer switch
3. Steel ball
4. Gasket
- ♦a♦ 5. Plug
- ♦Z♦ 6. Poppet plug
- ♦g♦ 7. Poppet spring
8. Steel ball
9. Vehicle speed sensor
- ♦f♦ 10. Transfer case plate

11. Needle bearing
- ♦X♦ 12. Rear cover
- ♦e♦ 13. Spacer
14. Dust seal guard
15. Dynamic damper
- ♦U♦ 16. Oil seal
17. Plug
- ♦P♦ 18. Spring pin (H-L shift fork)
19. Under guard <EXP>

V5MT1-8 (PART TIME TYPE – RHD)**Disassembly steps**

- 20. Snap ring
- ◊G◊▶P◊ 21. H-L shift rail
- ◊G◊▶N◊ 22. Chain cover
- 23. Thrust washer
- 24. Lock plate
- 25. Counter gear shaft
- 26. Counter gear
- 27. Needle bearing
- 28. Bearing spacer
- 29. Thrust washer
- 30. H-L shift fork
- 31. H-L clutch sleeve
- ▶N◊▶ 32. Interlock plunger
- ◊H◊▶d◊▶ 33. Spring pin (2-4WD shift lug)

- 34. 2-4WD shift lug
- 35. Distance piece
- 36. E-ring (2-4WD shift rail)
- 37. Spring seat
- 38. Spring
- 39. 2-4WD shift rail
- 40. 2-4WD shift fork
- ◊C◊▶H◊▶ 41. Rear output shaft
- ◊C◊▶H◊▶ 42. Chain
- ◊C◊▶H◊▶ 43. Front output shaft
- 44. Dust seal guard
- ▶A◊▶ 45. Oil seal
- 46. Transfer case

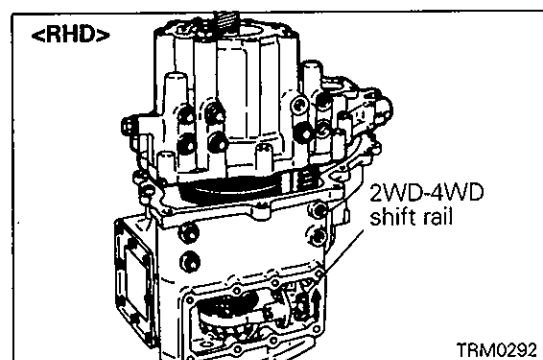
**SERVICE POINTS OF DISASSEMBLY****◁A▷ REMOVAL OF H-L SHIFT RAIL**

- (1) Shift the 2-4WD shift rail to the 4WD position.

NOTE

If the 2-4WD shift rail is left in the 2WD position, the interlock is actuated, preventing removal of the H-L shift rail.

- (2) Remove the H-L shift rail.

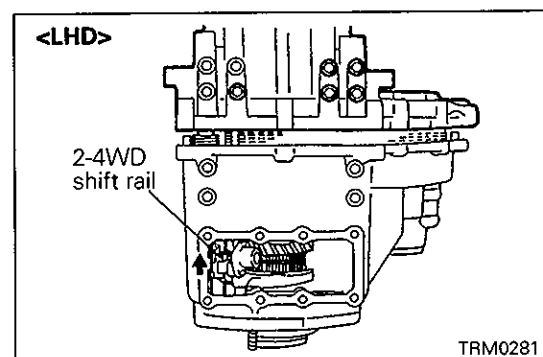
**◁B▷ REMOVAL OF H-L SHIFT RAIL / CHAIN COVER**

- (1) Lock the H-L shift rail at the high side, using the poppet spring.
- (2) Place the 2-4WD shift rail at the 4WD position.

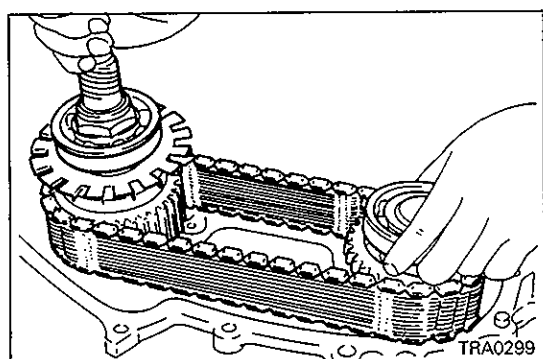
NOTE

If the 2-4WD shift rail is left at the 2WD position, the chain cover cannot be removed because interlock is actuated.

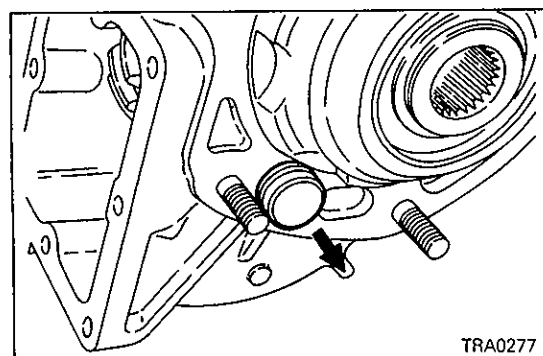
- (3) Remove the chain cover and remove the H-L shift rail.

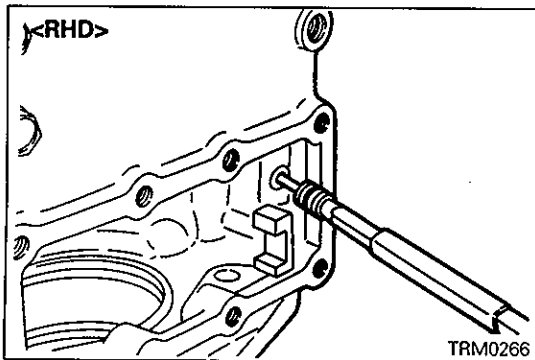
**◁C▷ REMOVAL OF REAR OUTPUT SHAFT / CHAIN / FRONT OUTPUT SHAFT**

- (1) Remove the front output shaft, rear output shaft and chain together.

**◁D▷ REMOVAL OF COUNTER GEAR SHIFT**

- (1) Remove the counter gear shaft toward the transmission case side.



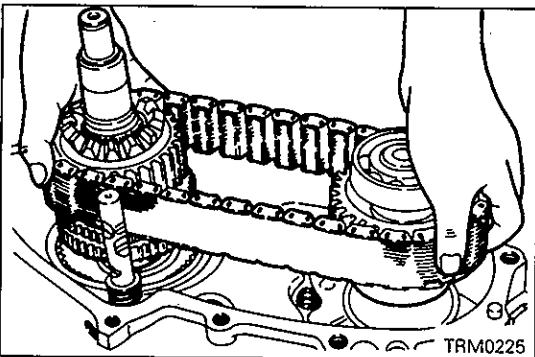
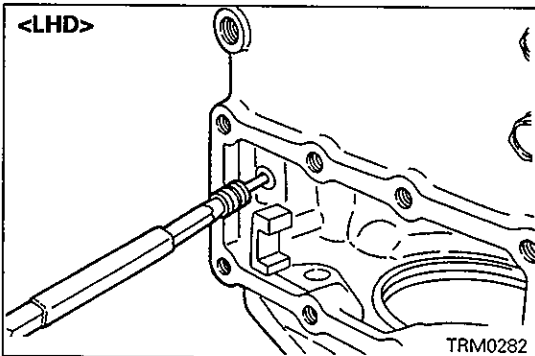


◊E◊ REMOVAL OF SPRING PIN

- (1) Using a pin punch, hammer the spring pin out.

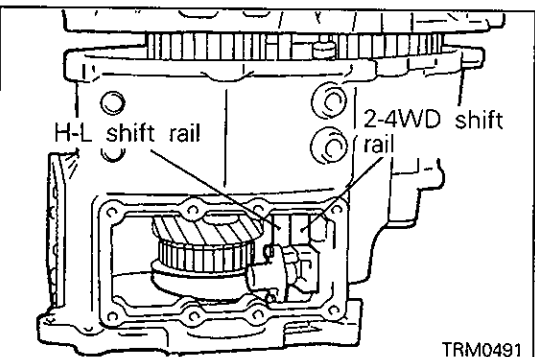
Caution

- Be careful when removing the pin punch, as there is a chance the spring will spring out.



◊F◊ REMOVAL OF 2-4WD SYNCHRONIZER / CHAIN / FRONT OUTPUT SHAFT

- (1) Remove, as a set, the 2-4WD synchronizer, chain and front output shaft from the transfer case.



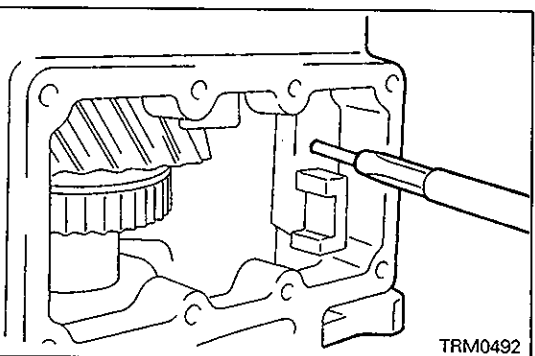
◊G◊ REMOVAL OF H-L SHIFT RAIL / CHAIN COVER

- (1) Fix the H-L shift rail at the High side.
- (2) Place the 2-4WD shift rail at the 4WD position.

NOTE

If the 2-4WD shift rail is placed at the 2WD position, the chain cover cannot be removed because of interlocking.

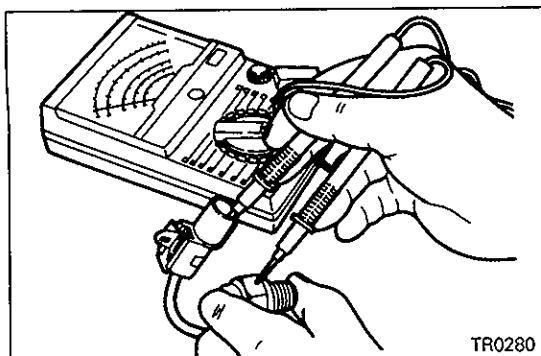
- (3) Remove the chain cover and remove H-L shift rail.



◊H◊ REMOVAL OF SPRING PIN

Caution

- The spring pin may fly out.



INSPECTION

Detection Switch, 4WD Switch and Transfer Switch Inspection

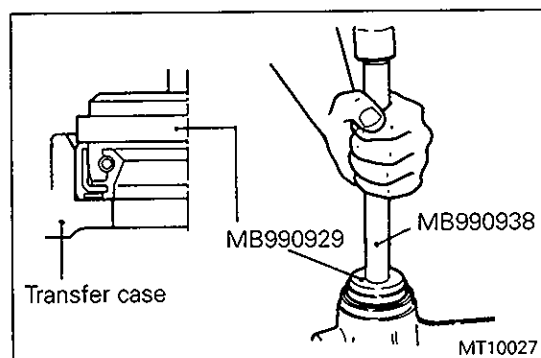
- (1) Check for continuity between the connector terminal and switch body.

Switch State	Continuity
Switch end pressed	No
Switch end released	Yes

SERVICE POINTS OF REASSEMBLY

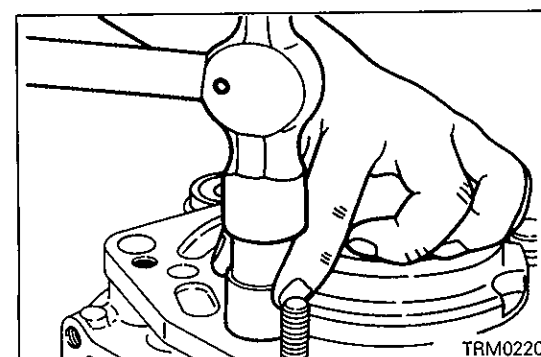
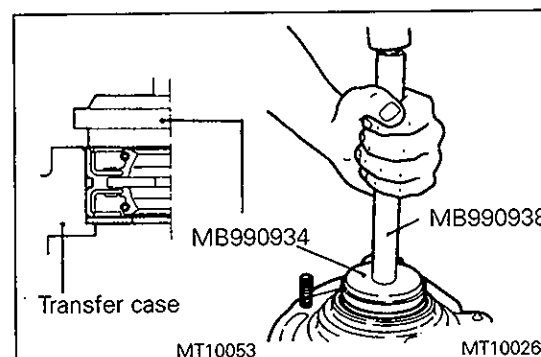
◆A◆ INSTALLATION OF OIL SEAL (FRONT OUTPUT SHAFT)

- (1) Apply transmission oil to the lip of the oil seal before press-fitting.



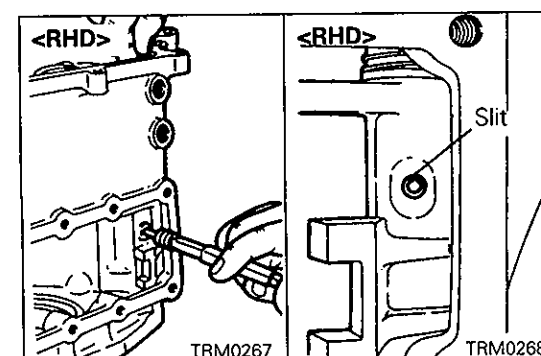
◆B◆ INSTALLATION OF OIL SEAL (INPUT GEAR)

- (1) Apply transmission oil to the lip of the oil seal before press-fitting.



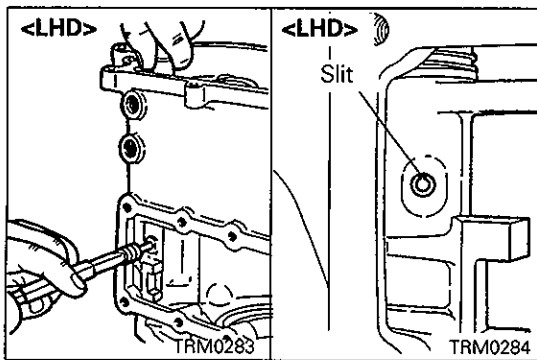
◆C◆ INSTALLATION OF OIL SEAL

- (1) Using a socket wrench, install the oil seal.



◆D◆ INSTALLATION OF 2-4WD SHIFT RAIL / 2-4WD SHIFT LUG / SPRING RETAINER / SPRING / SPRING PIN

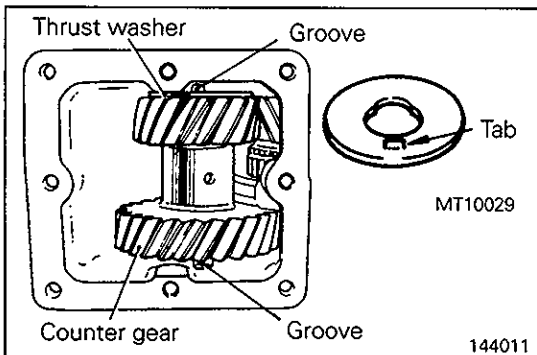
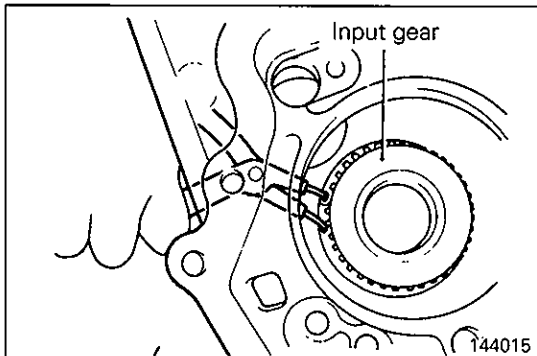
- (1) Mount the spring retainer and spring in the shift rail and set them with the shift lug in the transfer case.
- (2) While taking into account the direction of the shift rail, press the rail and line up the shift lug and shift rail spring pin hole.
- (3) While pressing the rail, install the spring pin in such a way that the slit of the spring pin will face the axial center of the shift rail.



◆E◆ INSTALLATION OF SNAP RING

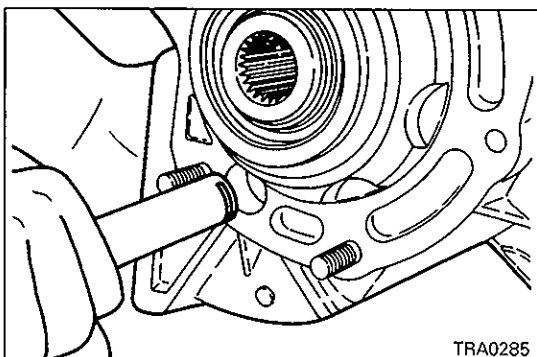
- (1) Select the thickest snap ring that will fit into the groove and install it.

Standard value: 0 – 0.06 mm (0 – 0.0024 in.)



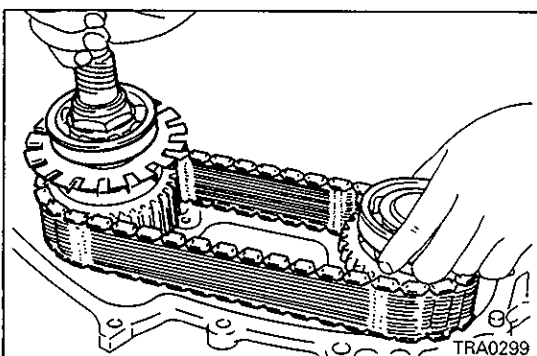
◆F◆ INSTALLATION OF THRUST WASHER

- (1) Install the thrust washer in such a way that the tab will fit into the case groove.



◆G◆ INSTALLATION OF COUNTER GEAR SHAFT

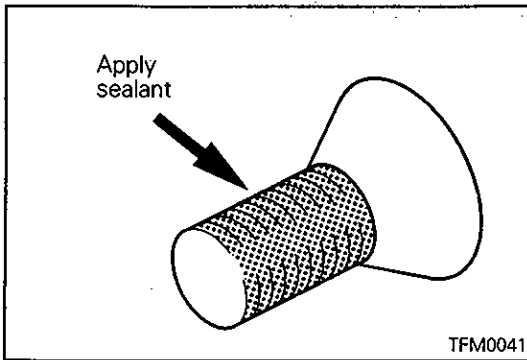
- (1) Insert the counter gear shaft from the transmission case side, while taking into account the lock plate groove position.



◆H◆ INSTALLATION OF REAR OUTPUT SHAFT / CHAIN / FRONT OUTPUT SHAFT

- (1) Engage the chain precisely with the sprockets of the rear output shaft and the front output shaft.
- (2) Install the 2-4WD shift fork on the 2-4WD clutch sleeve. While passing them along the 2-4WD shift rail, install the rear and front output shaft and chain.

Intentionally blank

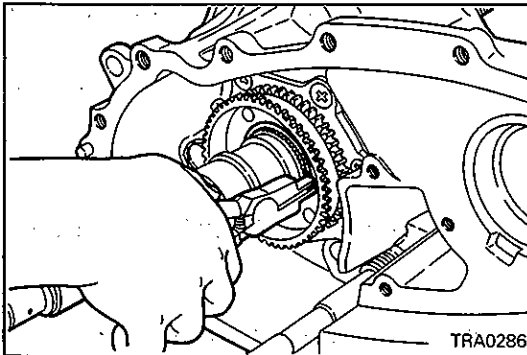


INSTALLATION OF BEARING RETAINER

- (1) The bearing retainer screw is a precoated bolt. When it is to be reused, apply a sealant beforehand.

Specified adhesive:

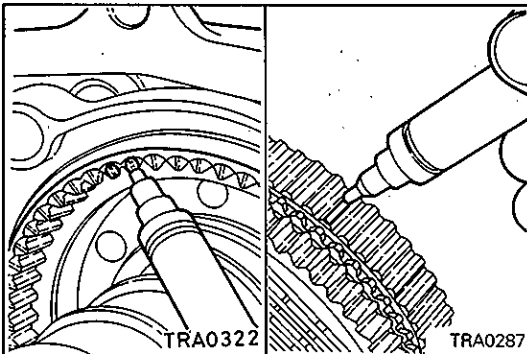
3M STUD Locking No. 4170 or equivalent



INSTALLATION OF SNAP RING

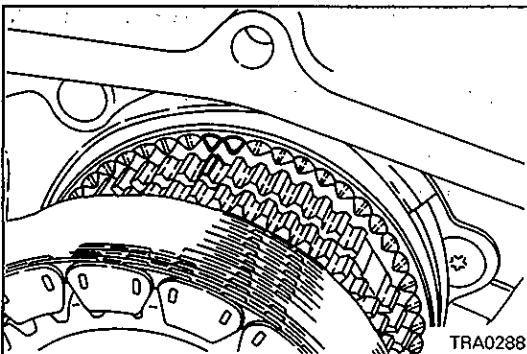
- (1) Select and install the thickest snap ring that fits in the groove.

Standard value: 0 – 0.08 mm (0 – 0.0030 in.)

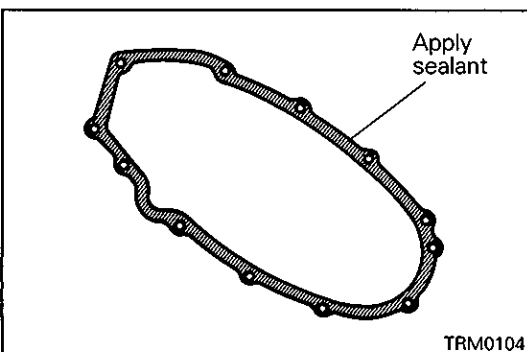


INSTALLATION OF 2-4WD SYNCHRONIZER / CHAIN / FRONT OUTPUT SHAFT

- (1) Make a white paint mark on the deep groove portions (three places) of the 2-4WD synchronizer.
 (2) Make a white paint mark on the projections (three places) of the 2-4WD synchronizer sleeve splines.



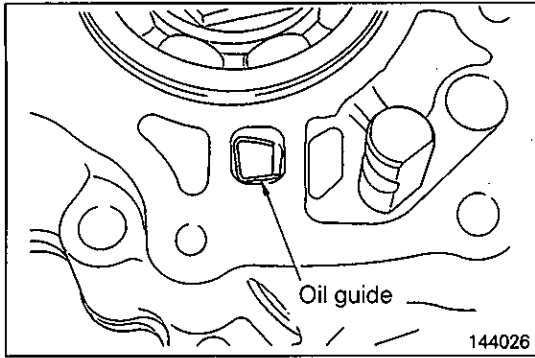
- (3) Place the chain in tight mesh with the 2-4WD synchronizer and front output shaft sprockets.
 (4) With both sprockets spaced the farthest apart, simultaneously install them on the transfer case.



APPLICATION OF SEALANT TO CHAIN COVE GASKET

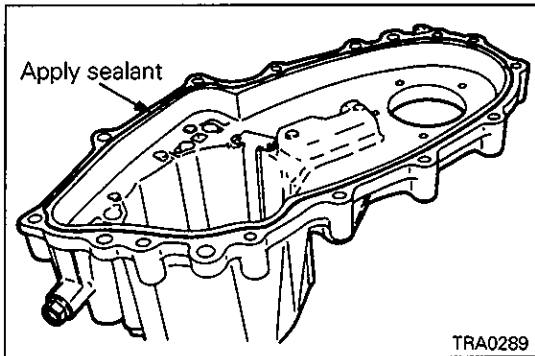
Specified sealant:

Mitsubishi genuine sealant Part No. 997740 or equivalent



◆M◆ INSTALLATION OF CHAIN COVER

- (1) Install the chain cover so that the end of the oil guide may enter the hole shown in the illustration.



◆N◆ INSTALLATION OF CHAIN COVER / INTERLOCK PLUNGER

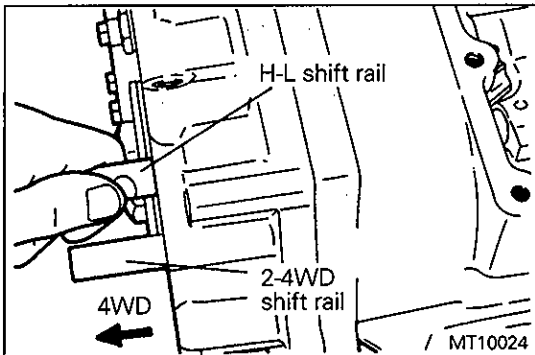
- (1) Insert the interlock plunger into a position where it does not interfere with the 2-4WD shift rail.
- (2) Apply a sealant to the chain cover before installing it.

Specified sealant:

Mitsubishi genuine sealant Part No. 997740 or equivalent

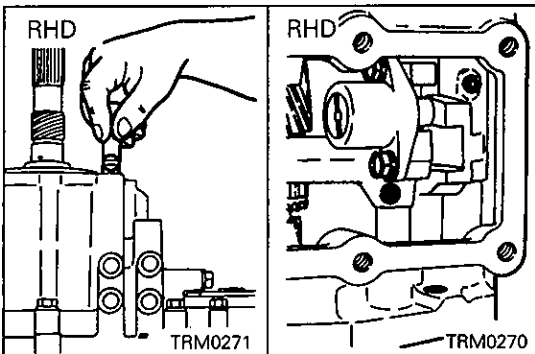
Caution

- Squeeze the sealant out evenly to apply it in an unbroken, non-excessive quantity.



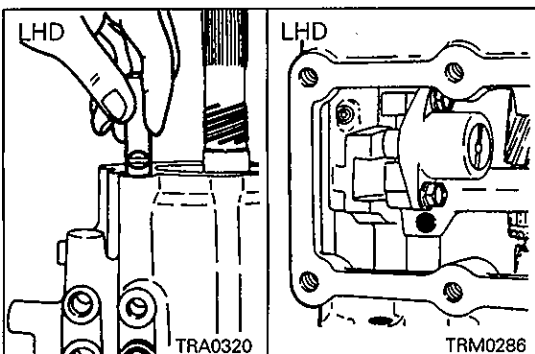
◆O◆ INSTALLATION OF H-L SHIFT RAIL

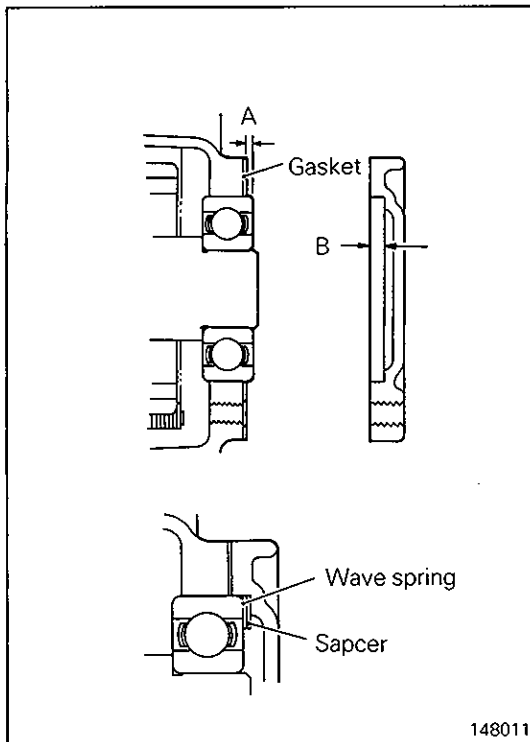
- (1) Shift the 2-4WD shift rail to the 4WD position.
- (2) Insert the H-L shift rail from the case and pass the rail through the shift fork.



◆P◆ INSTALLATION OF H-L SHIFT RAIL / SPRING PIN FOR H-L SHIFT FORK

- (1) Insert the H-L shift rail from the H-L shift rail plug hole, while taking its direction into account.
- (2) Line up the shift rail and shift fork spring pin hole and install the spring pin so that the slit of the spring pin will face the axial center of the shift rail.





◆Q◆ INSTALLATION OF COVER / WAVE SPRING (SPACER)

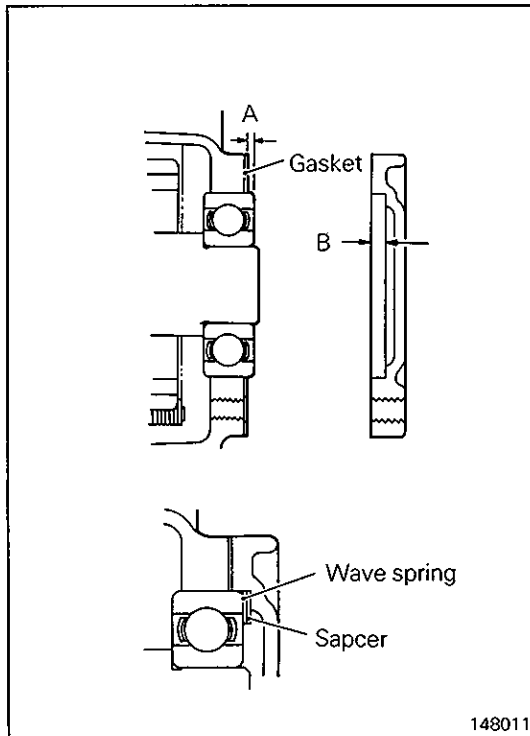
- (1) Measure projection "A" of the front output shaft rear bearing and depth "B" of the cover.
If B is more than 2 mm (0.08 in.) greater than A, add a spacer between the wave spring and cover.
If the subtracted value is 2 mm (0.08 in.) or less, using only the wave spring is enough.
- (2) Apply a sealant to the cover and mounting bolt threads before installation.

Specified sealant:

Mitsubishi genuine sealant Part No. 997740 or equivalent

Caution

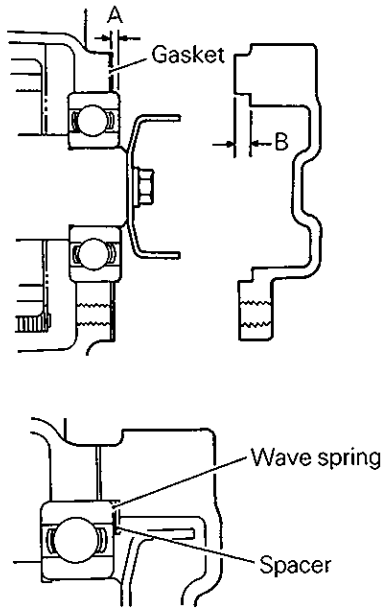
- Squeeze the sealant out evenly to apply it in an unbroken, non-excessive quantity.



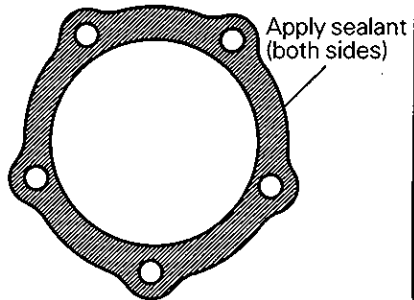
◆R◆ INSTALLATION OF COVER GASKET / COVER

- (1) Measure the projection (A) of the rear bearing from the end of the front output shaft and the depth (B) of indentation in the cover.
If the clearance (a difference between A and B) exceeds 2 mm (0.08 in.), insert a spacer between the cover and the wave spring. If the clearance is 2 mm (0.08 in.) or less, use the wave spring alone.

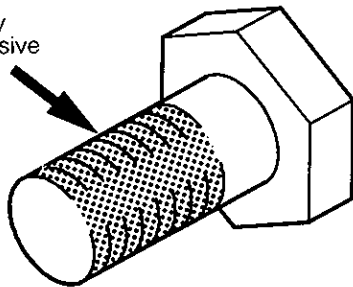
V5MT1-1-AFS only



145105



TRM0103

Apply
adhesive

TFM0054

- (2) Apply specified sealant to both sides of the cover gasket.

Specified sealant:

Mitsubishi genuine sealant Part No. 997740 or equivalent

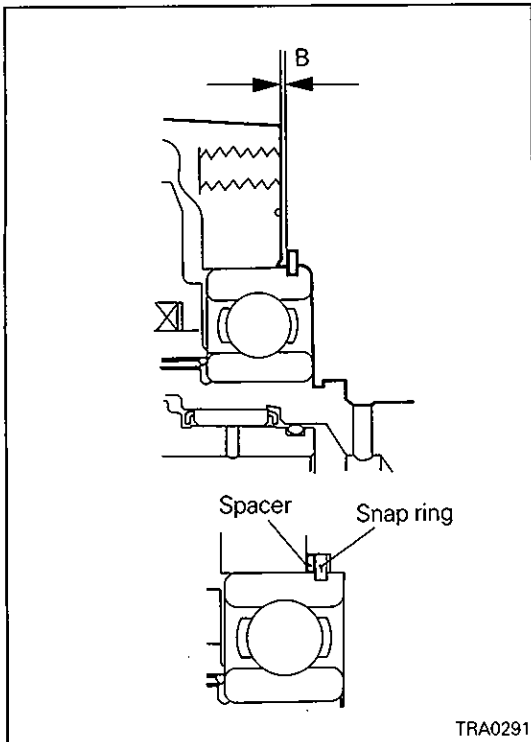
- (3) Install the cover.

- (4) Apply the specified adhesive to the threaded part of the cover installation bolt.

Specified adhesive:

3M STUD Locking No. 4170 or equivalent

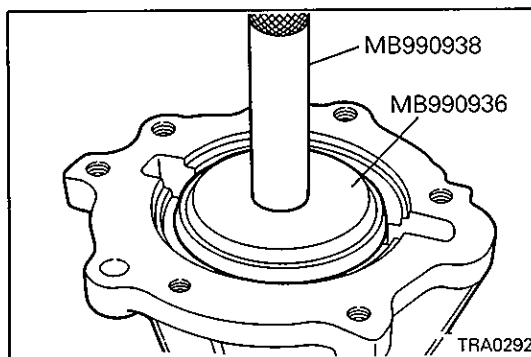
- (5) Tighten the cover installation bolt at the specified torque.



◆S◆ INSTALLATION OF SNAP RING / SPACER

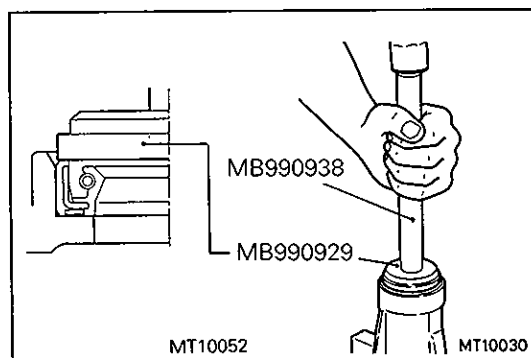
- (1) Measure clearance "B" between the ball bearing snap ring and the chain cover. Select a spacer of the thickness equivalent to the sum of measured value "B" and the following value.

Standard value: 0.02 – 0.1 mm (0.0008 – 0.0040 in.)



◆T◆ INSTALLATION OF OIL SEAL

- (1) Using a special tool, install the oil seal.



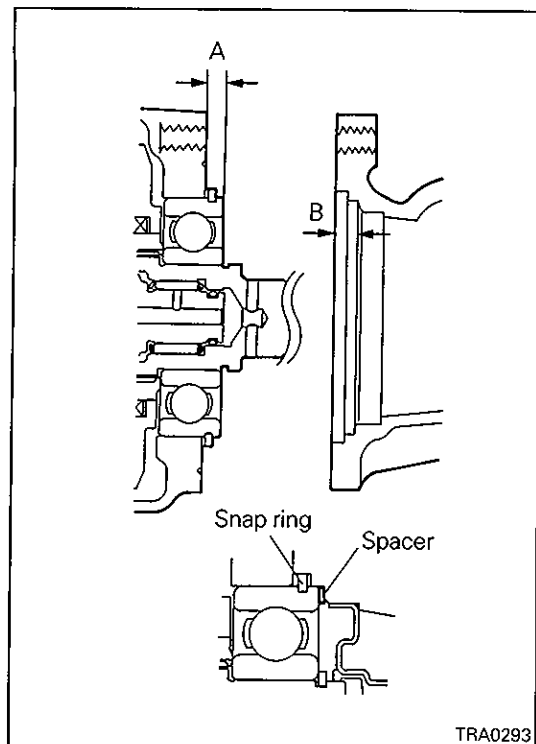
◆U◆ INSTALLATION OF OIL SEAL

- (1) Apply transmission oil to the lip of the oil seal before press-fitting.

◆V◆ INSTALLATION OF SPACER

- (1) Measure projection "A" of the rear output shaft bearing and depth "B" of the second stage of the rear cover. Subtract A from B and let the answer be C. Subtract the thickness of the spacer from C, and select a snap ring so that the subtracted value will be the standard value shown below.

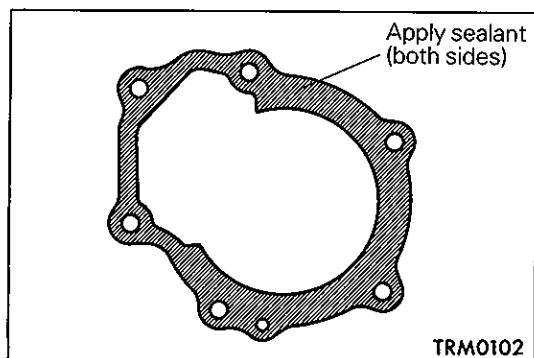
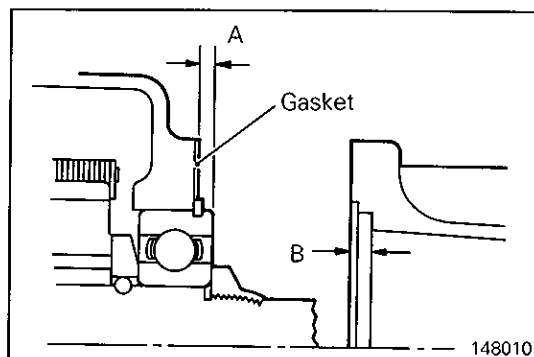
Standard value: 0 – 0.1 mm (0 – 0.004 in.)



◆W◆ INSTALLATION OF SPACER / REAR COVER GASKET / REAR COVER

- (1) Measure the amount of protrusion of the rear output shaft rear bearing "A" and the amount of inset in the cover "B". Select a spacer which adjusts the end play to the standard value.

Standard value: 0 – 0.1 mm (0 – 0.004 in.)



- (2) Apply sealant to both sides of the rear cover gasket.

Specified sealant:

Mitsubishi genuine sealant Part No. 997740 or equivalent

◆X◆ INSTALLATION OF REAR COVER

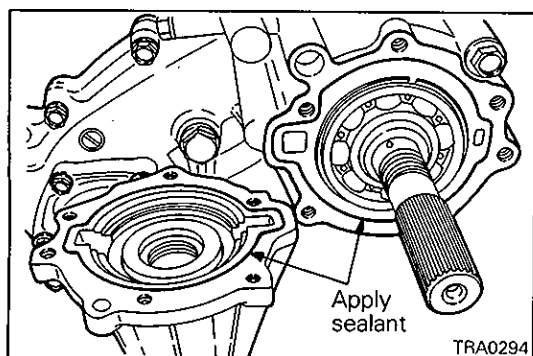
- (1) Apply a sealant to the rear cover before installation.

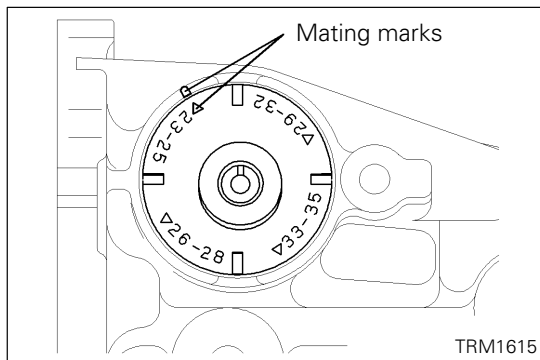
Specified sealant:

Mitsubishi genuine sealant Part No. 997740 or equivalent

Caution

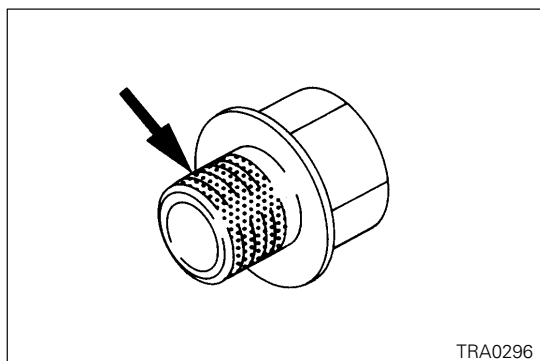
- Squeeze the sealant out evenly to apply it in an unbroken, non-excessive quantity.





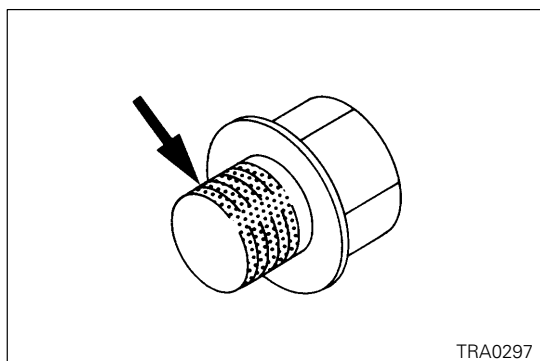
◆Y◆ INSTALLATION OF SPEEDOMETER GEAR

- (1) Of the triangle marks at four places on the speedometer gear, find a one whose number range (the number range of the driven gear teeth) has a marking. Then, install the sleeve while aligning the triangle mark with the mark on the extension housing.



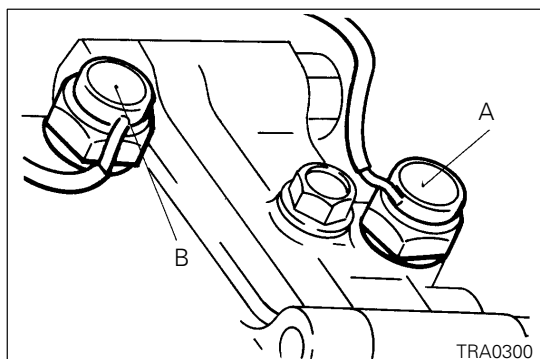
◆Z◆ APPLICATION OF ADHESIVE TO POPPET PLUG

- (1) Apply an adhesive to the poppet plug before installation.
Specified adhesive: 3M ATD Part No. 8660 or equivalent



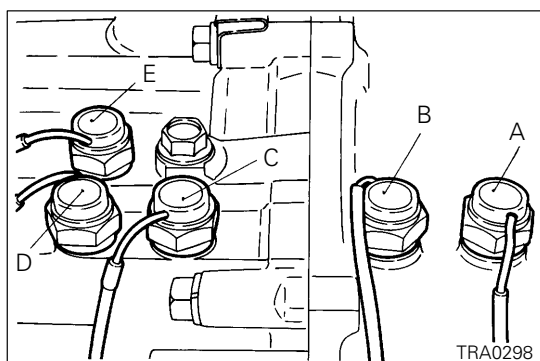
◆a◆ APPLICATION OF ADHESIVE TO PLUG

- (1) The plug is a precoated one. When it is to be reused, apply an adhesive before installation.
Specified adhesive: 3M ATD Part No. 8660 or equivalent



◆b◆ INSTALLATION OF DETECTION SWITCHES

- (1) Make sure that the detection switches are installed in the correct position.
A: Ball built in
B: Ball separate

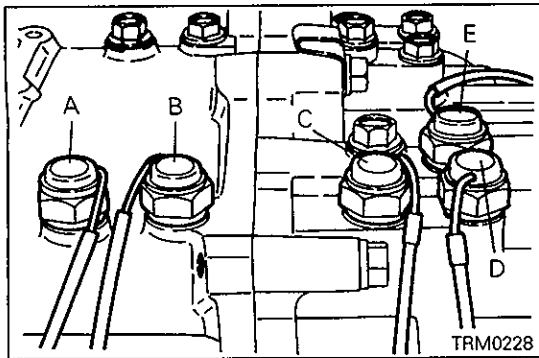


◆c◆ INSTALLATION OF DETECTION SWITCHES

- (1) Make sure that the detection switches are installed in the correct position.

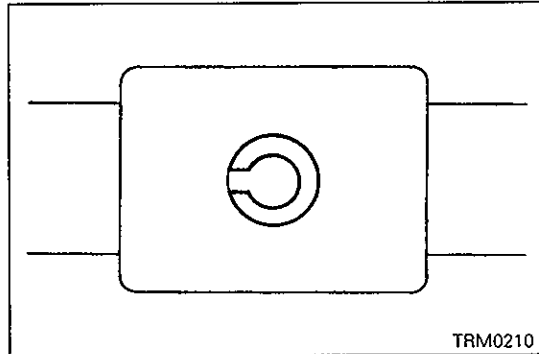
LHD

- A: Ball built in, connector brown
- B: Ball built in, connector black
- C: Ball separate, connector brown
- D: Ball separate, connector black
- E: Ball separate, connector white

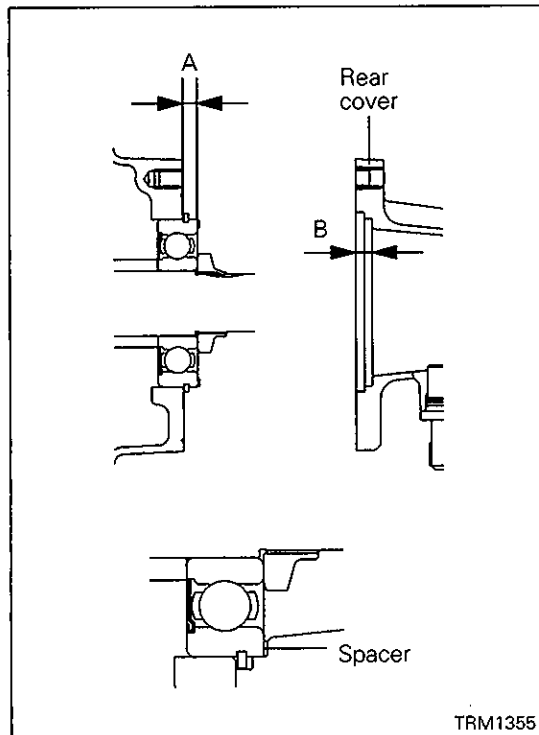


RHD

- A: Ball built in, connector brown
- B: Ball built in, connector black
- C: Ball separate, connector brown
- D: Ball separate, connector black
- E: Ball separate, connector white



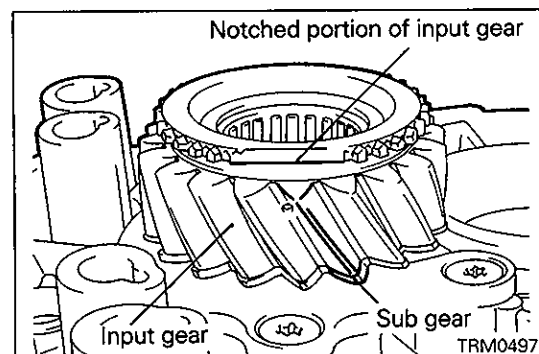
INSTALLATION OF SPRING PIN



INSTALLATION OF SPACER

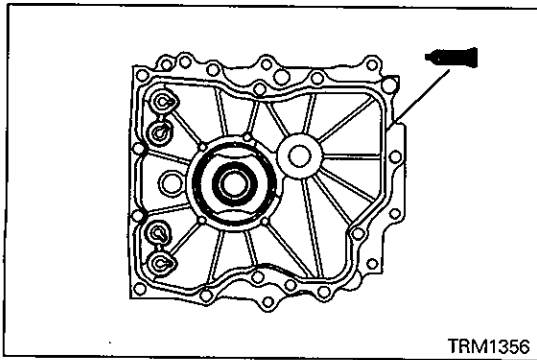
- (1) Measure projection "A" of the rear output shaft bearing and depth "B" of the second stage of the rear cover.
- (2) Subtract "A" from "B" and let the answer be "C". Subtract the thickness of the spacer from "C", and select a spacer so that the subtracted value will be the standard value shown below.

Standard value: 0 – 0.1 mm (0 – 0.004 in.)



INSTALLATION OF TRANSFER CASE PLATE

- (1) Align one of the sub gear teeth with the notched tooth of the input gear.



- (2) Apply a bead of sealant to the transfer case plate as illustrated.

Specified sealant:

Mitsubishi genuine sealant Part No. MD997740 or equivalent

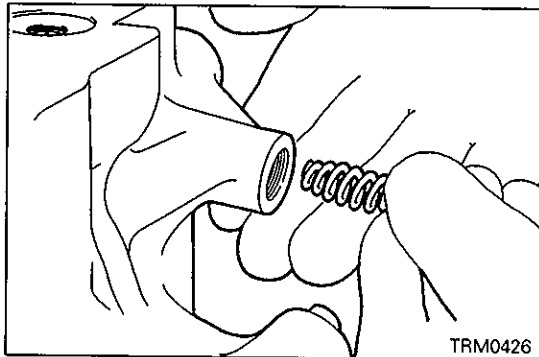
Caution

- **Squeeze sealant out evenly to make sure that it is not broken or excessively supplied.**

- (3) Install the transfer case plate together with the input gear, while sliding the input gear tooth aligned in Step (1) along the tooth space of the countershaft cluster gear.

NOTE

The transfer case plate must be installed smoothly without hitch.



◆◆◆ INSTALLATION OF POPPET SPRING

- (1) Install the spring with its tapered end toward the ball.

8. H-L SHIFT FORK

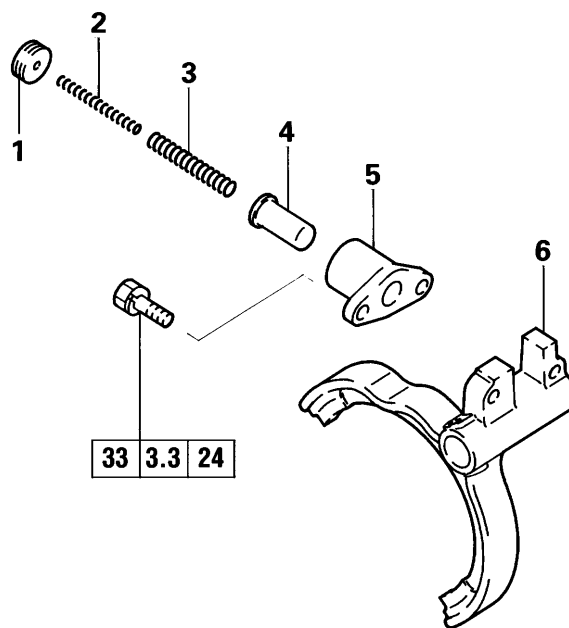
V5MT1-3, 4, 6, 8, B, D



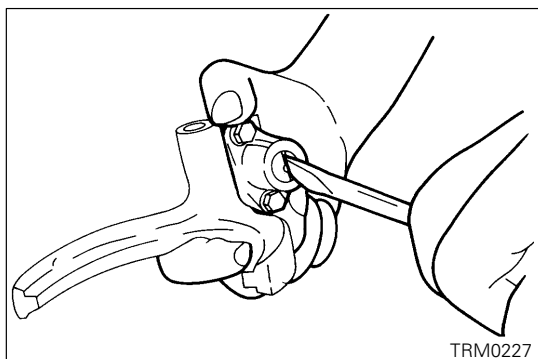
Apply gear oil to all moving parts before installation.

Disassembly steps

- ◆A◆ 1. Return spring plug
2. Return spring
3. Return spring
4. Select plunger
5. Plunger boss
6. H-L shift fork



TRM0226



TRM0227

SERVICE POINT OF REASSEMBLY

◆A◆ INSTALLATION OF RETURN SPRING PLUG

- (1) Apply a sealant to the return spring plug and thread the plug in until it is flush with the plunger boss end.

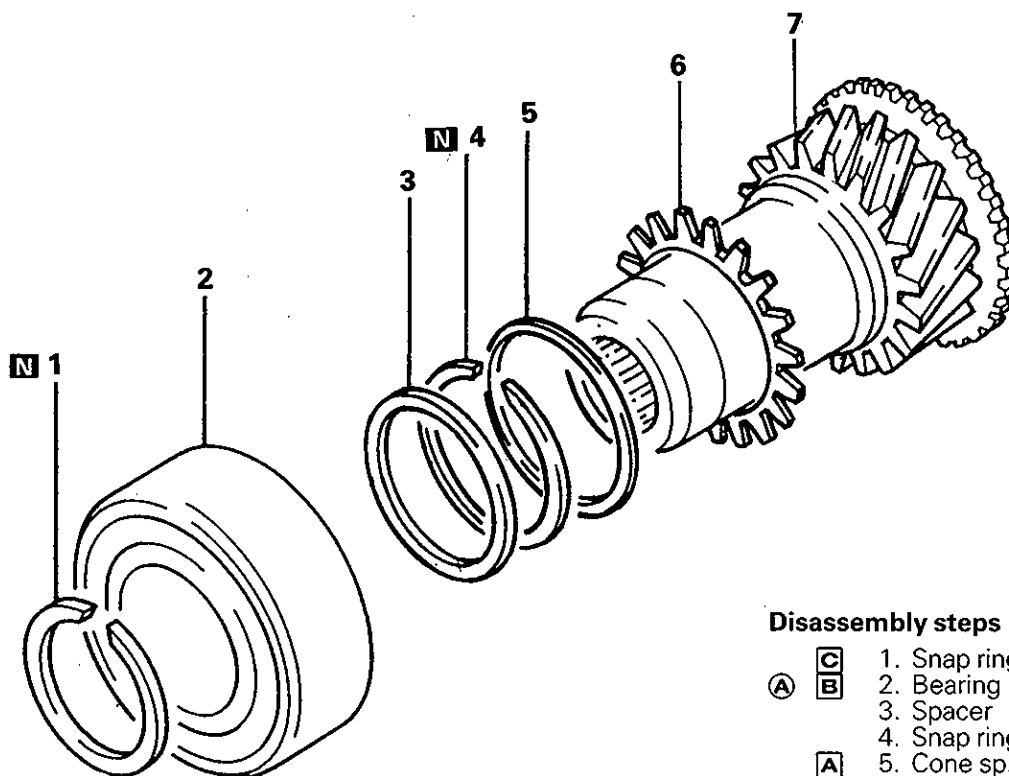
Specified sealant:

3M Super Wetherstrip No. 8001 or equivalent

NOTES

9. INPUT SHAFT

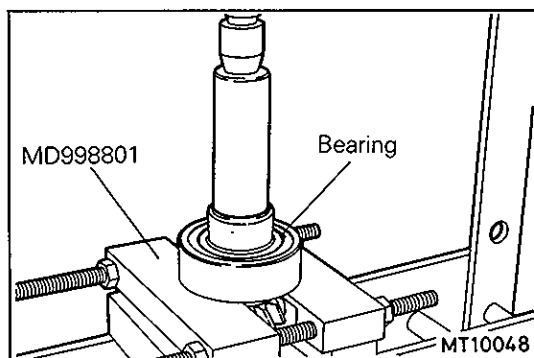
DISASSEMBLY AND REASSEMBLY



Disassembly steps

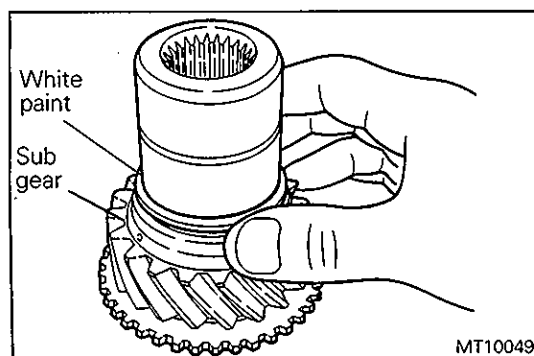
- (A) C B 1. Snap ring
 2. Bearing
 3. Spacer
 4. Snap ring
 (A) A 5. Cone spring
 6. Sub gear
 7. Input gear

145109



SERVICE POINT OF DISASSEMBLY

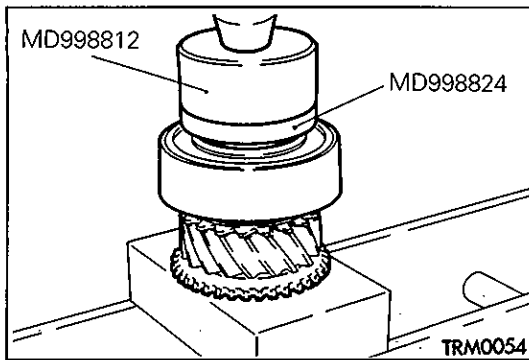
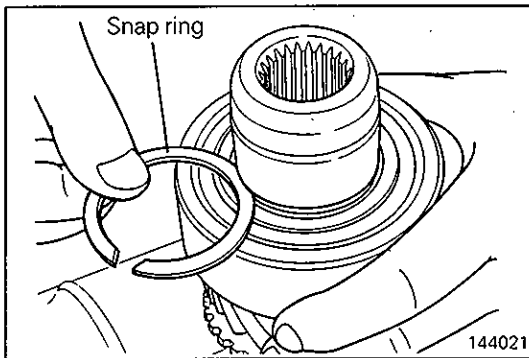
(A) REMOVAL OF BEARING



SERVICE POINTS OF REASSEMBLY

(A) INSTALLATION OF CONE SPRING

- (1) Install the sub gear to the input gear before installing the cone spring with the white painted side facing up.

**B INSTALLATION OF BEARING****C INSTALLATION OF SNAP RING**

- (1) Select the thickest snap ring that will fit into the groove in the front end of the input gear and install it.

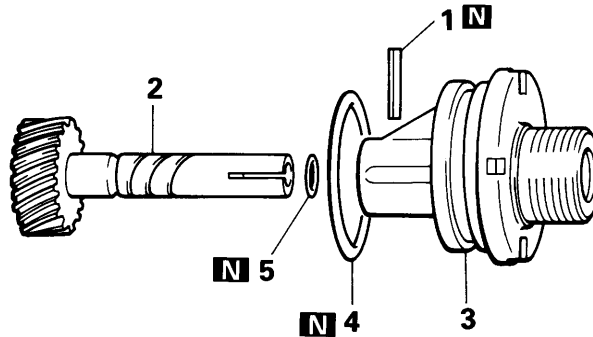
Standard value: 0 – 0.06 mm (0 – 0.0024 in.)

10. SPEEDOMETER GEAR DISASSEMBLY AND REASSEMBLY

V5MT1-1, 2, 3, 4, 6, B, D



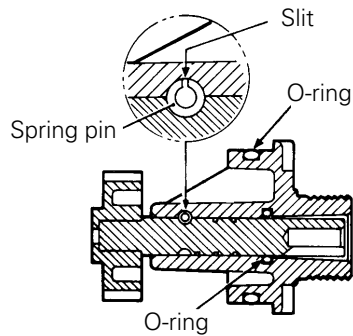
Apply gear oil to all moving parts before installation.



Disassembly steps

- A**
1. Spring pin
 2. Drive gear
 3. Sleeve
 4. O-ring
 5. O-ring

110008



110019

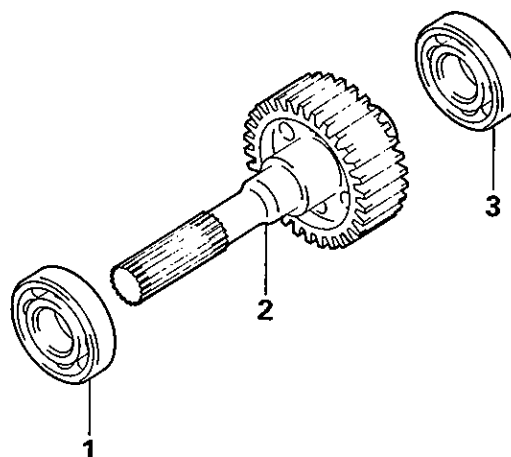
SERVICE POINTS OF REASSEMBLY

A INSTALLATION OF SPRING PIN

- (1) Drive the spring pin in while making sure that slit does not face the gear shaft.

NOTES

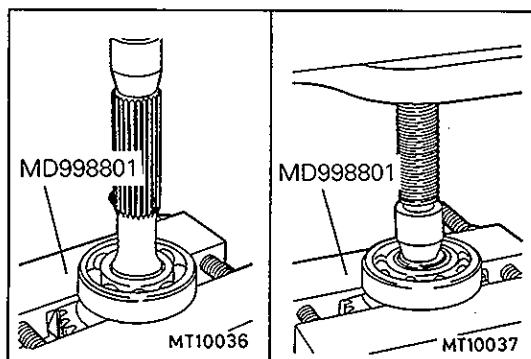
11. FRONT OUTPUT SHAFT



Disassembly steps

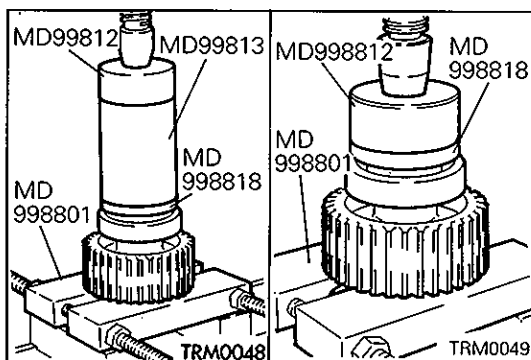
- ◊A◊ ◊A◊ 1. Ball bearing
- ◊A◊ ◊A◊ 2. Ball bearing
- 3. Front output shaft

TRA0319



SERVICE POINT OF DISASSEMBLY

◊A◊ REMOVAL OF BALL BEARING



SERVICE POINT OF REASSEMBLY

◊A◊ INSTALLATION OF BALL BEARING

NOTES

12. REAR OUTPUT SHAFT

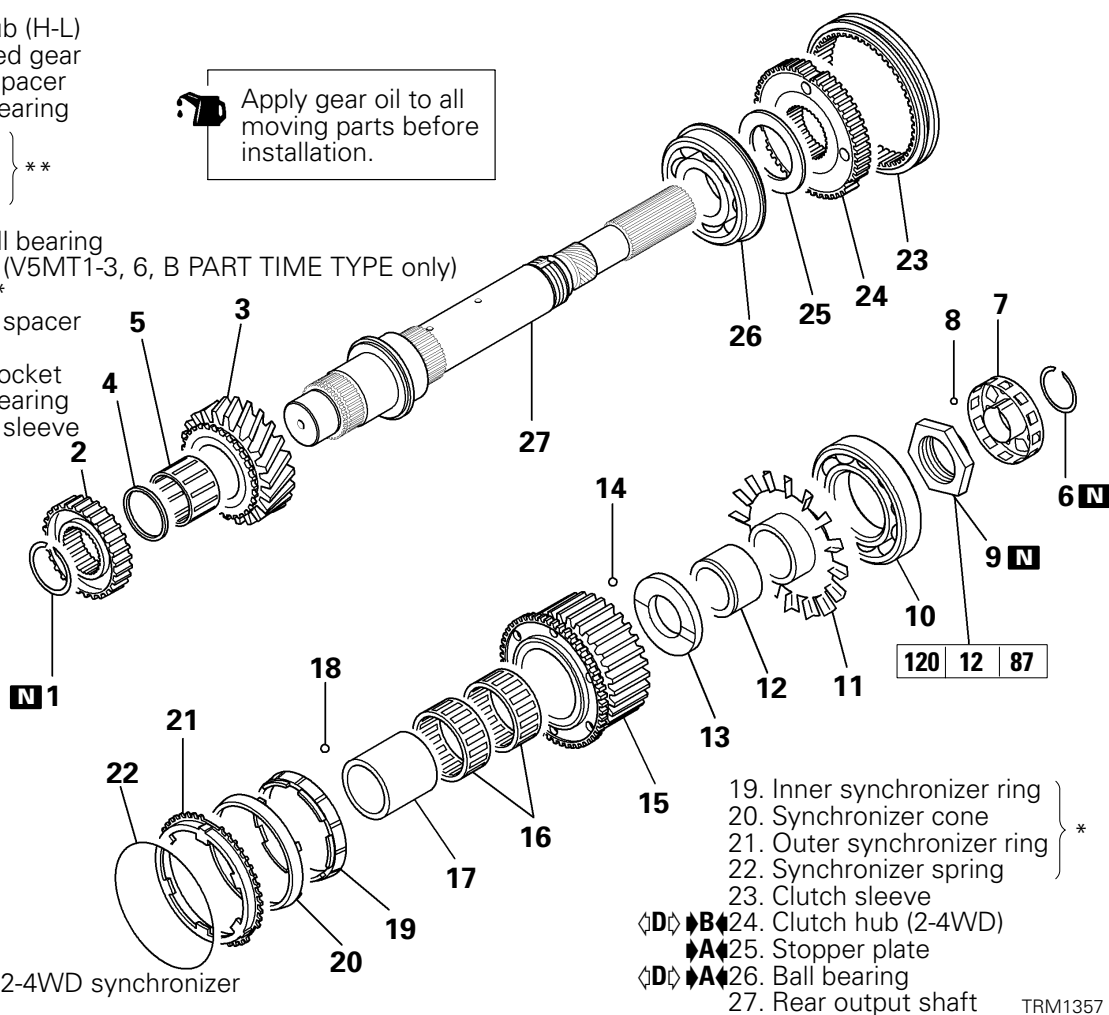
V5MT-1, 2 V5MT1-3, 4, 6, 8, B, D (PART TIME TYPE)

Disassembly steps

- 1. Snap ring
- 2. Clutch hub (H-L)
- 3. Low speed gear
- 4. Bearing spacer
- 5. Needle bearing
- 6. Snap ring
- 7. Rotor
- 8. Steel ball
- 9. Lock nut
- 10. Radial ball bearing
- 11. Oil guide (V5MT1-3, 6, B PART TIME TYPE only)
- 12. Sleeve **
- 13. Sprocket spacer
- 14. Steel ball
- 15. Drive sprocket
- 16. Needle bearing
- 17. Sprocket sleeve
- 18. Steel ball



Apply gear oil to all moving parts before installation.

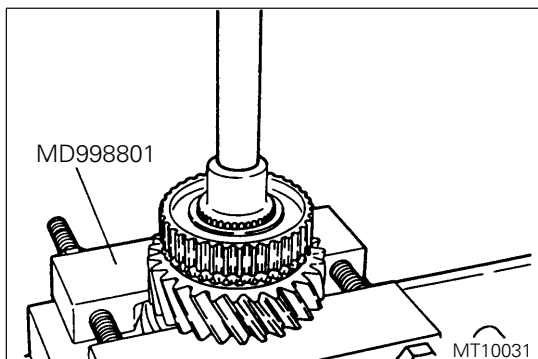


NOTE

*: Only vehicles with 2-4WD synchronizer

**: V5MT1-8 only

TRM1357



SERVICE POINTS OF DISASSEMBLY

◀A▶ REMOVAL OF CLUTCH HUB (H-L)

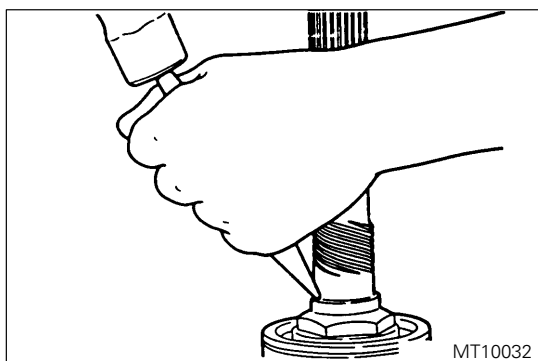
NOTE

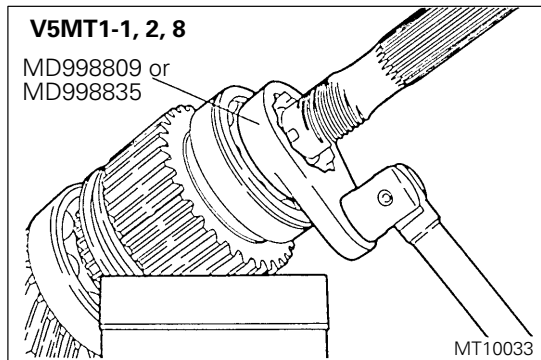
Some of the clutch hubs may be removed without using a press.

- (1) Set the special tool so that load may be received by low speed gear.
- (2) Use a press to push the front end of the rear output shaft and remove the hub and gear.

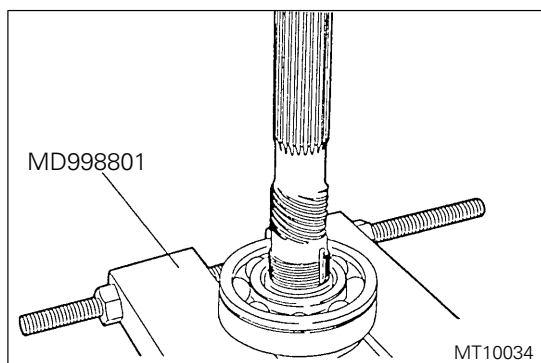
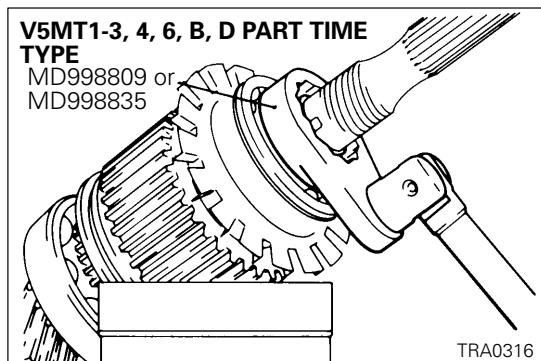
◀B▶ REMOVAL OF LOCK NUT

- (1) Use a chisel and hammer to set the lock nut free.





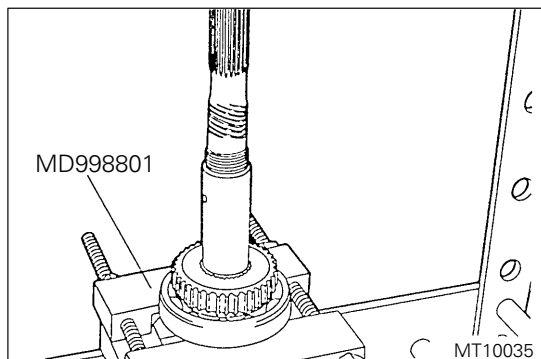
(2) Using the special tool, remove the lock nut.



❖C❖ REMOVAL OF RADIAL BALL BEARING

NOTE

Some of the bearings are loosely fitted on the shaft and may be removed without using a press.



❖D❖ REMOVAL OF CLUTCH HUB (2-4WD) / BALL BEARING

NOTE

Some of the 2-4WD clutch hubs may be removed without using a press.

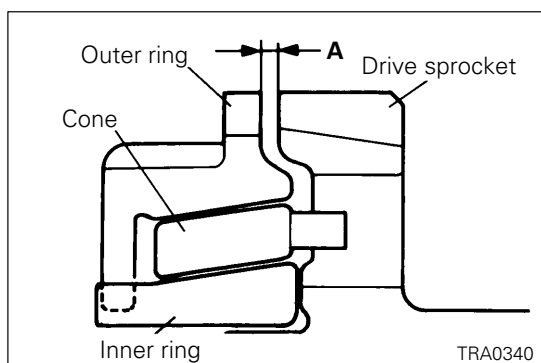
- (1) Set the special tool so that load may be received by the bearing.
- (2) Use a press to push the rear end of the rear output shaft and remove the hub and bearing.

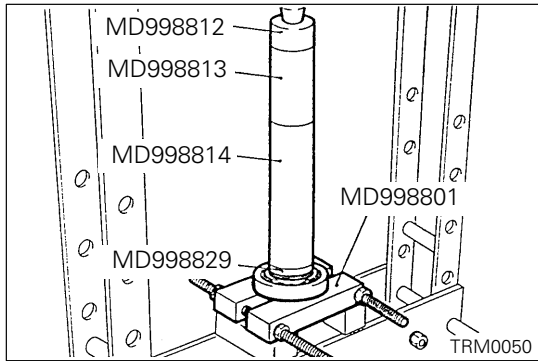
INSPECTION

OUTER SYNCHRONIZER RING / INNER SYNCHRONIZER RING / SYNCHRONIZER CONE

- (1) Combine the inner and outer synchronizer rings and cone with drive sprocket, and measure dimension A in the illustration. If dimension A is less than the limit, replace them as a set.

Limit value: 0.3 mm (0.012 in.)

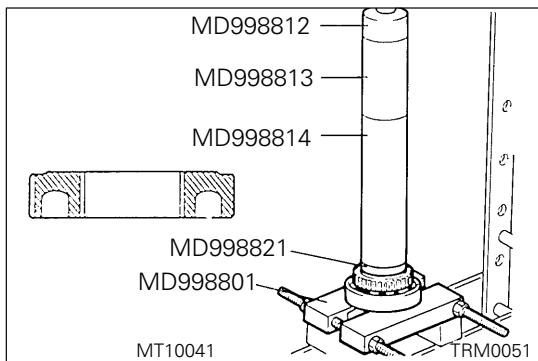




SERVICE POINTS OF REASSEMBLY

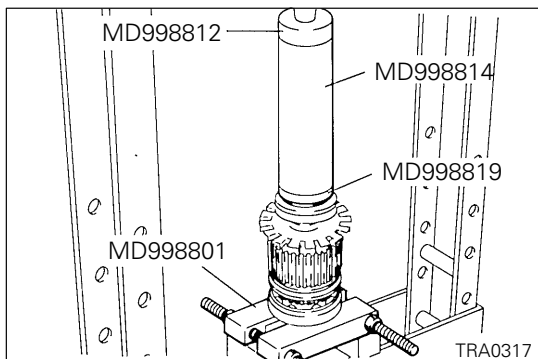
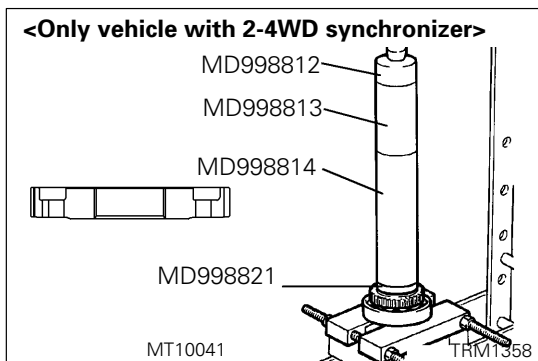
◆A◆ INSTALLATION OF BALL BEARING / STOPPER PLATE

- (1) Place the stopper plate on the bearing.
- (2) Using a special tool, mount the ball bearing on the rear output shaft.

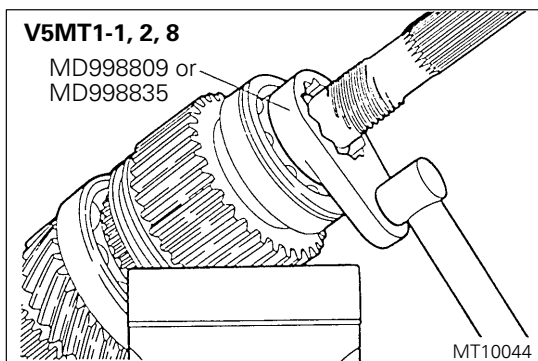


◆B◆ INSTALLATION OF CLUTCH HUB (2-4WD)

- (1) Direct the clutch hub as shown in the illustration to install it to the rear output shaft.

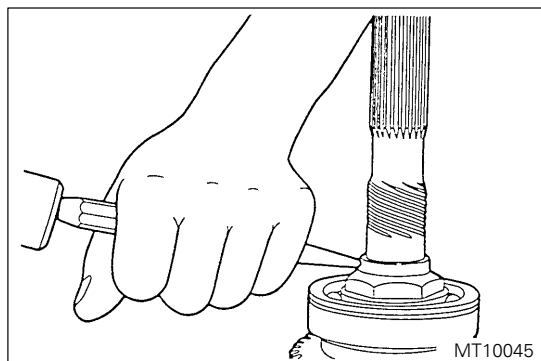
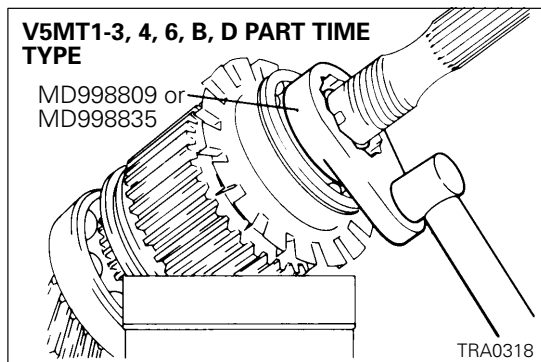


◆C◆ INSTALLATION OF RADIAL BALL BEARING

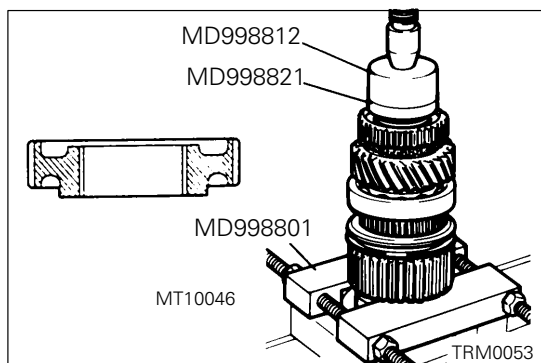


◆D◆ INSTALLATION OF LOCK NUT

- (1) Use the special tool to tighten the rear output shaft lock nut to specified torque.



- (2) Use a punch and hammer to secure the lock nut in alignment with the groove in the output shaft.

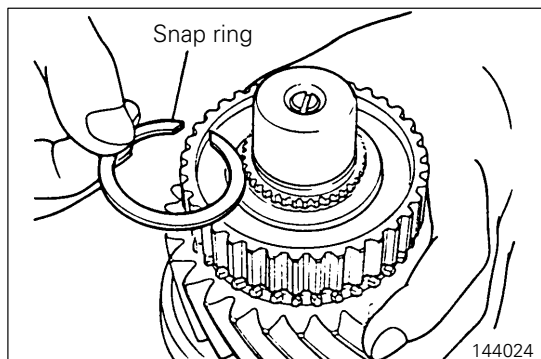


◆E◆ INSTALLATION OF CLUTCH HUB (H-L)

- (1) Use the special tools to install the H-L clutch hub to the rear output shaft.

NOTE

Some of the hubs may be installed without using a press.



◆F◆ INSTALLATION OF SNAP RING

- (1) Select the thickest snap ring that will fit into the groove in the front end of the rear output shaft and install it.

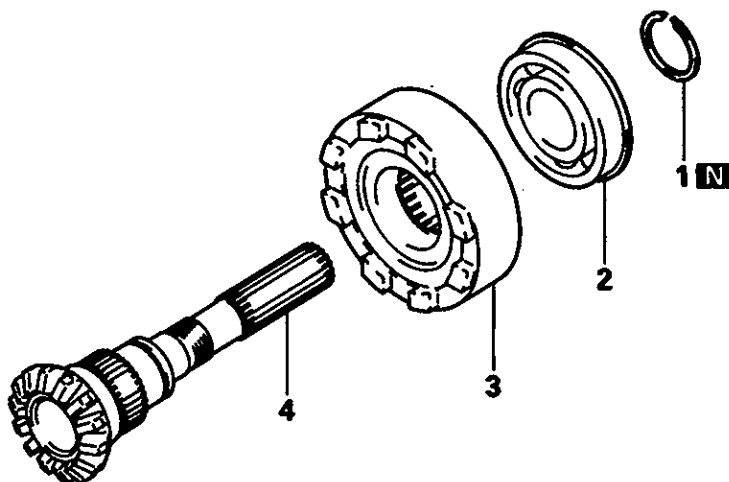
Standard value: 0 – 0.08 mm (0 – 0.0031 in.)

13. REAR OUTPUT SHAFT

V5MT1-3, 4, 6 (SUPER SELECT TYPE)

Disassembly steps

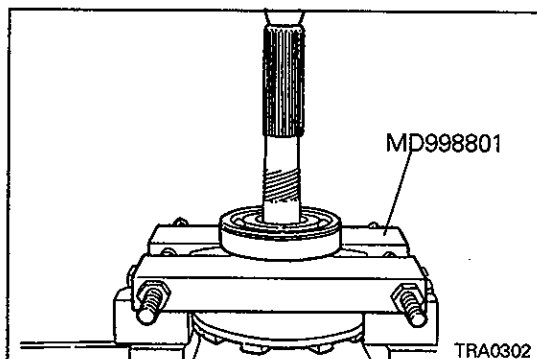
- 1. Snap ring
- 2. Ball bearing
- 3. Viscous coupling
- 4. Rear output shaft



TRA0301

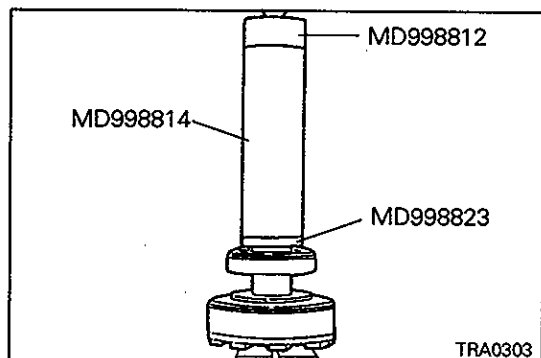
SERVICE POINT OF DISASSEMBLY

◀A▶ REMOVAL OF BALL BEARING



SERVICE POINTS OF REASSEMBLY

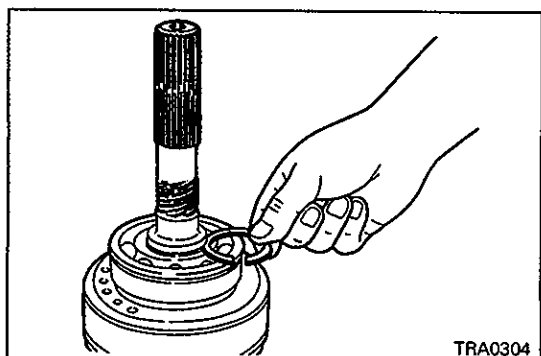
▶A▶ INSTALLATION OF BALL BEARING



▶B▶ INSTALLATION OF SNAP RING

- (1) Select and mount an appropriate snap ring that fits the groove.

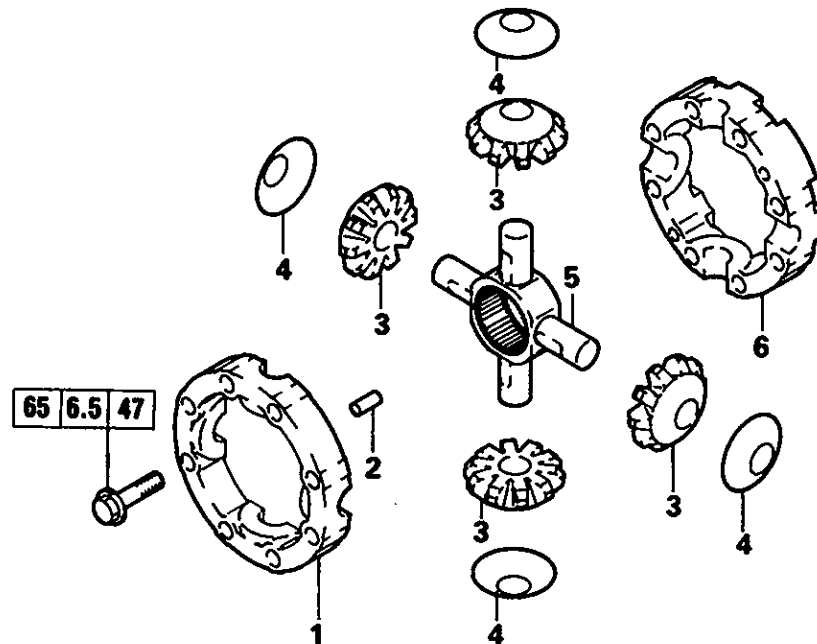
Standard value: 0 – 0.08 mm (0 – 0.0031 in.)



NOTES

14. CENTER DIFFERENTIAL CASE

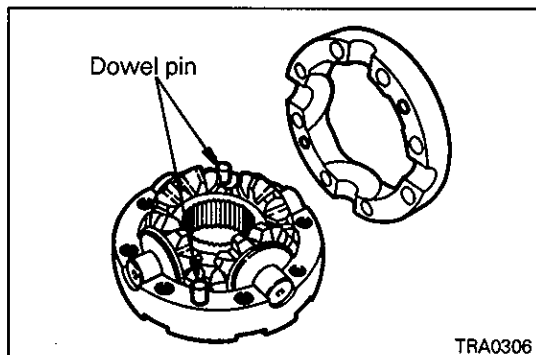
V5MT1-3, 4, 6
(SUPER SELECT TYPE)



Disassembly steps

- ◆A◆ 1. Center differential case front
- 2. Dowel pin
- 3. Pinion
- 4. Thrust washer
- 5. Pinion shaft
- 6. Center differential case rear

TRA0305



SERVICE POINT OF REASSEMBLY

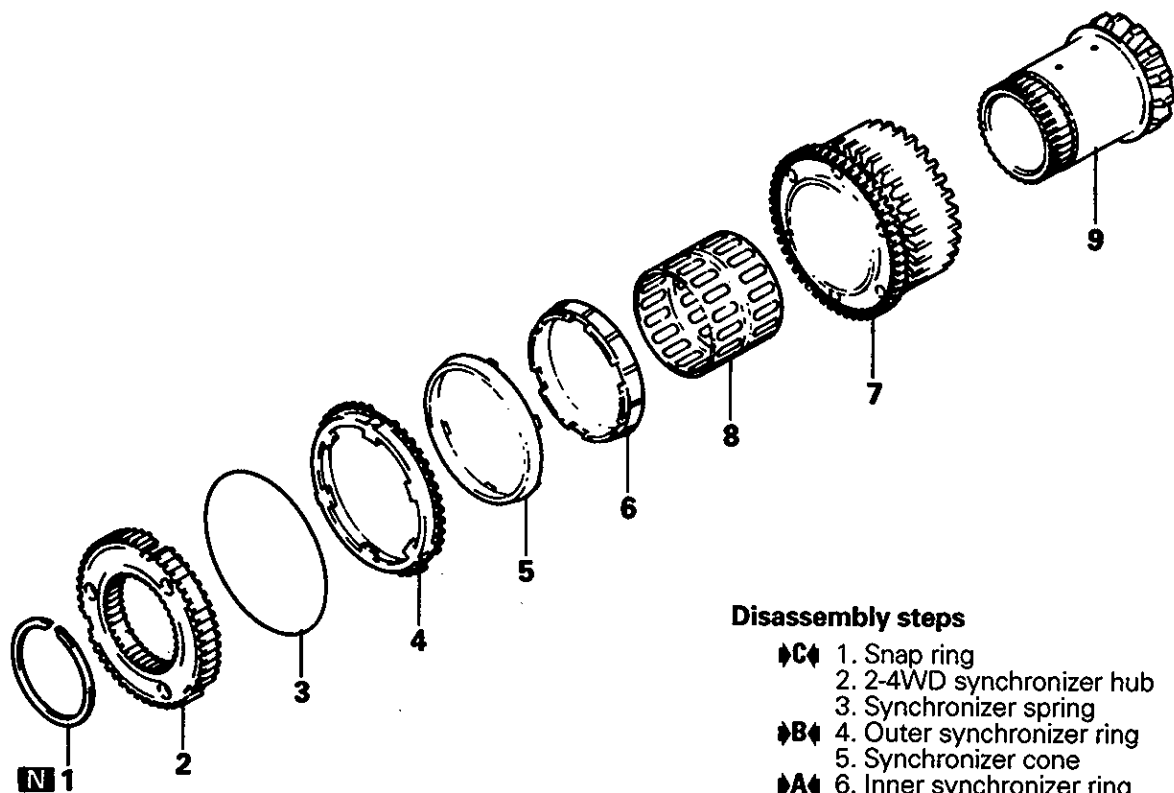
◆A◆ INSTALLATION OF CENTER DIFFERENTIAL CASE FRONT

- (1) Pay attention to the positions of the dowel pins when reassembling, and make sure that the alignment marks on the outside circumference are in alignment.

NOTES

15.2-4WD SYNCHRONIZER

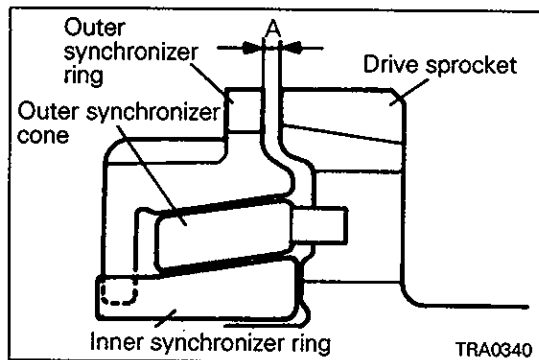
V5MT1-3, 4, 6 (SUPER SELECT TYPE)



Disassembly steps

- ⇨C⇨ 1. Snap ring
- 2. 2-4WD synchronizer hub
- 3. Synchronizer spring
- ⇨B⇨ 4. Outer synchronizer ring
- 5. Synchronizer cone
- ⇨A⇨ 6. Inner synchronizer ring
- 7. Drive sprocket
- 8. Needle bearing
- 9. Front drive pinion

TRA0307



TRA0340

INSPECTION

SYNCHRONIZER RING / SYNCHRONIZER CONE

- (1) Combine the inner and outer synchronizer rings and cone with the drive sprocket and measure dimension A in the illustration. If the dimension A is under the limit, replace the whole set.

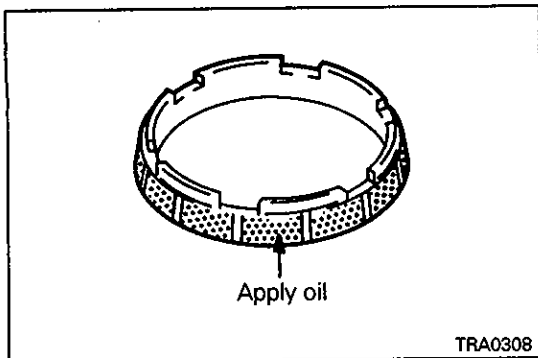
Limit: 0.3 mm (0.0118 in.)

NOTE

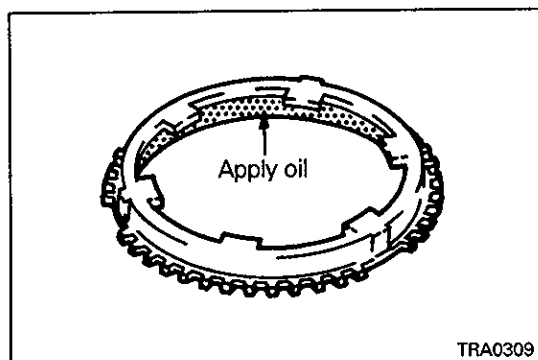
Scratches are produced on the cone surface in the rotating direction by the synchronizer ring liners. Therefore, the parts need not be replaced if the above-mentioned clearance is satisfied.

SERVICE POINTS OF REASSEMBLY**◆A◆ INSTALLATION OF INNER SYNCHRONIZER RING**

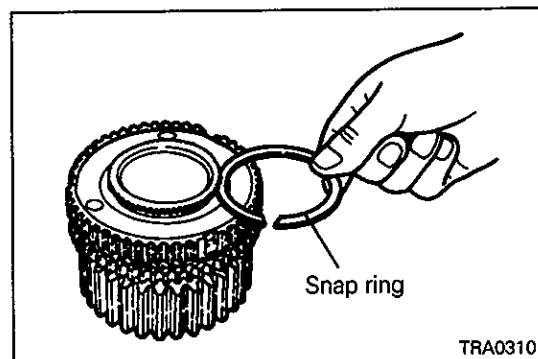
- (1) Apply transmission oil to the synchronizer ring cone surface before installation.

**◆B◆ INSTALLATION OF OUTER SYNCHRONIZER RING**

- (1) Apply transmission oil to the synchronizer ring cone surface before installation.

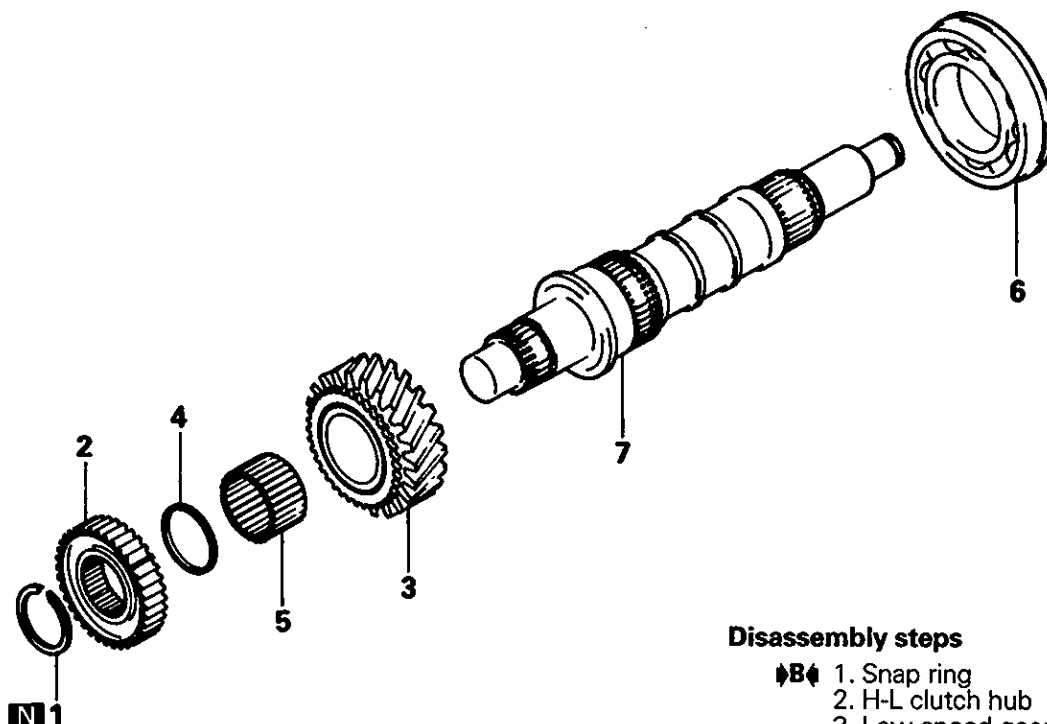
**◆C◆ INSTALLATION OF SNAP RING**

- (1) Select and mount a thickness snap ring that fits the groove.
Standard value: 0 – 0.08 mm (0 – 0.0031 in.)



16. TRANSFER DRIVE SHAFT

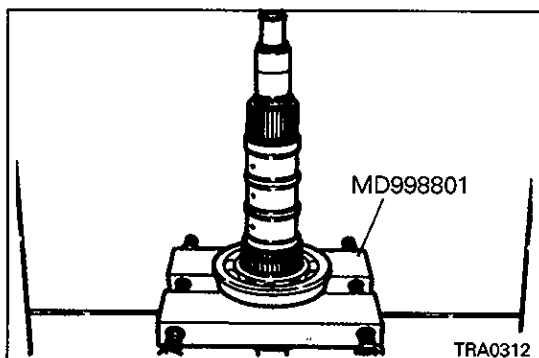
V5MT1-3, 4, 6 (SUPER SELECT TYPE)



Disassembly steps

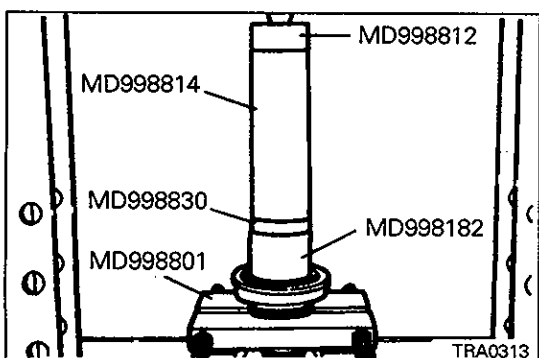
- ◆B◆ 1. Snap ring
- 2. H-L clutch hub
- 3. Low speed gear
- 4. Bearing spacer
- 5. Needle bearing
- ◇A◇◆A◆ 6. Ball bearing
- 7. Transfer drive shaft

TRA0311



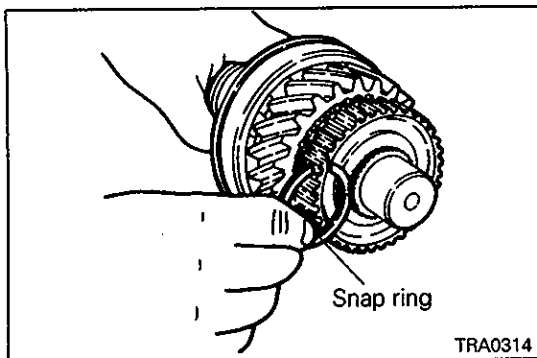
SERVICE POINT OF DISASSEMBLY

◇A◇ REMOVAL OF BALL BEARING



SERVICE POINTS OF REASSEMBLY

◆A◆ INSTALLATION OF BALL BEARING

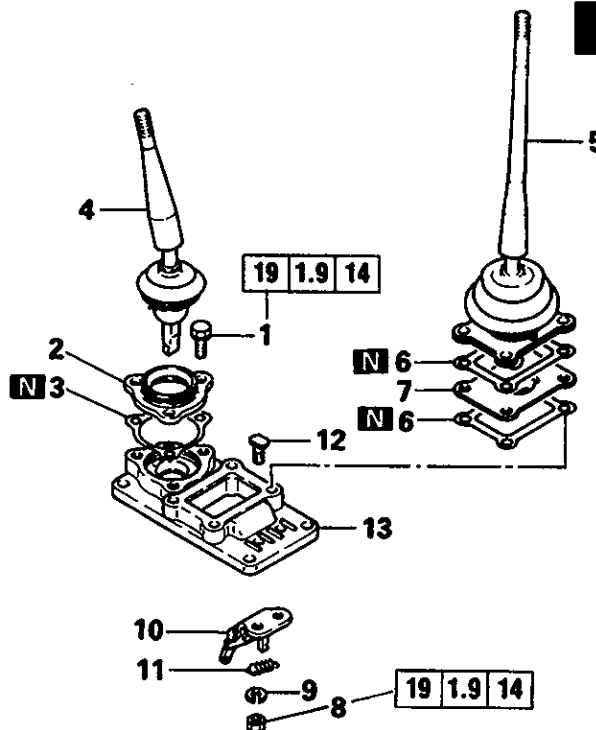
**◆B◆ INSTALLATION OF SNAP RING**

- (1) Select and mount a thickness snap ring that fits the groove.

Standard value: 0 – 0.08 mm (0 – 0.0031 in.)

V5MT1-1, 2

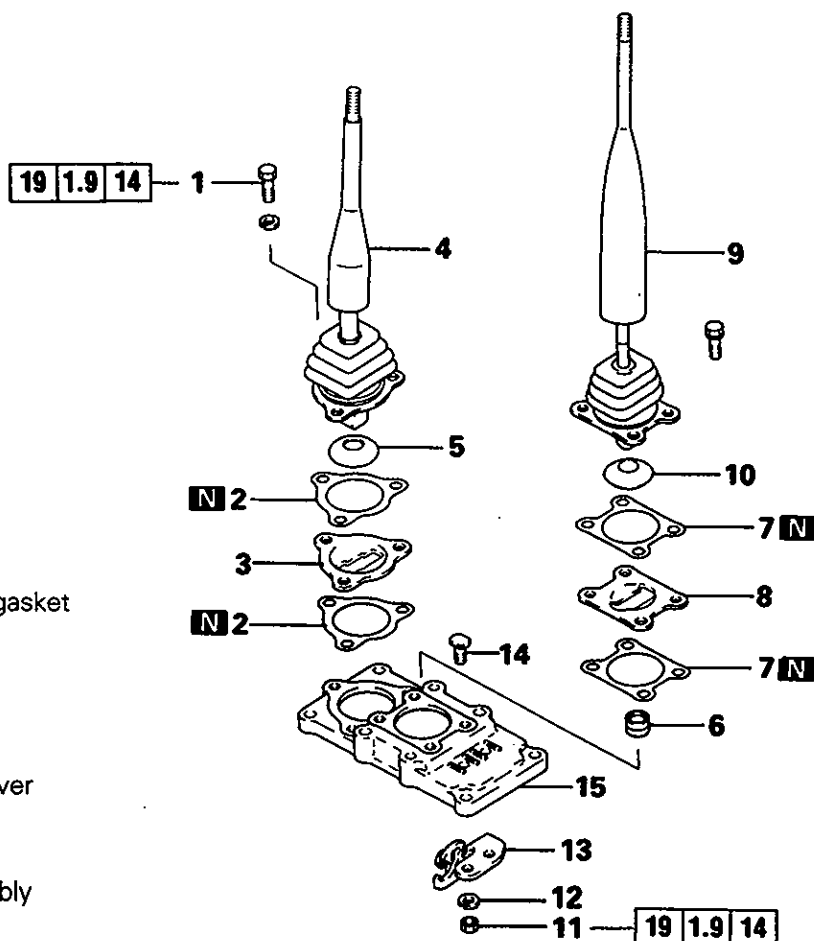
1. Bolt
2. Control housing cover
- ➡C➡ 3. Control housing cover gasket
4. Transfer control lever
- ➡B➡ 5. Transmission control lever
6. Gasket
7. Stopper plate
8. Nut
9. Spring washer
10. Stopper bracket assembly
11. Return spring
- ➡A➡ 12. Special bolt
13. Control housing

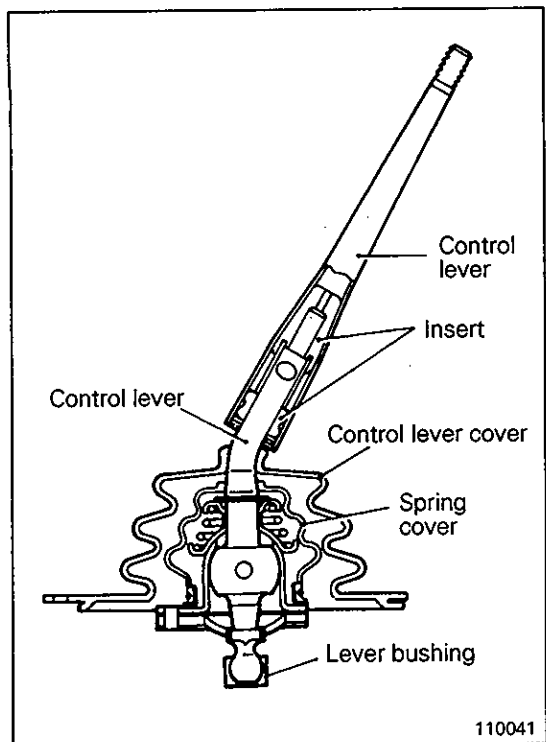


145042

V5MT1-3, 4, 6

1. Bolt
2. Control housing cover gasket
3. Control housing cover
4. Transfer control lever
5. Cover
6. Lever bushing
7. Control lever gasket
8. Stopper plate
9. Transmission control lever
10. Cover
11. Nut
12. Spring washer
13. Stopper bracket assembly
14. Special bolt
15. Control housing



**INSPECTION**

- (1) Check for play between control lever and control lever. If play is evident, replace lever assembly.
- (2) Push control lever in and check to ensure that it moves smoothly up and down.
- (3) Check cover for damage and replace if necessary. To remove cover, cut away with knife. To install new cover, first apply thin coat of oil to periphery of control lever.
- (4) Then install by sliding it down from top of lever. Check lever bushing for wear and replace if necessary.

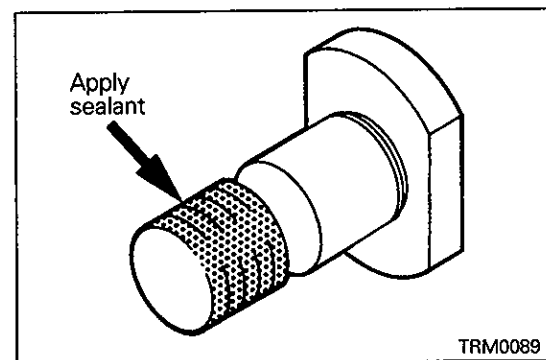
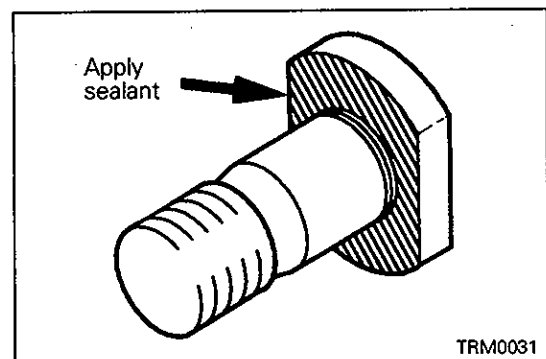
SERVICE POINTS OF REASSEMBLY**◆A◆ APPLICATION OF SEALANT TO SPECIAL BOLT**

Specified sealant:

3M ATD Part No. 8660 or equivalent

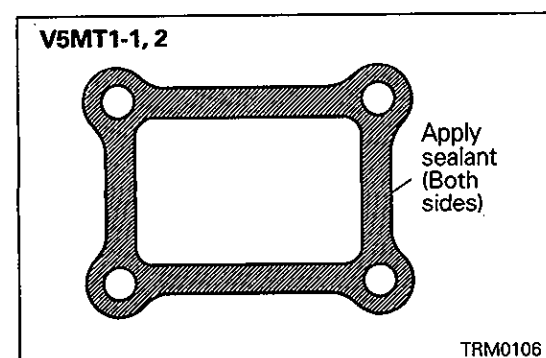
Specified sealant:

3M Scotch Grip No. 2353 or equivalent

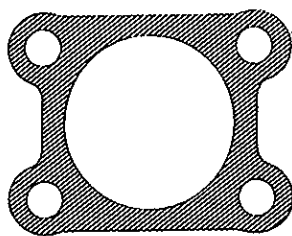
**◆B◆ APPLICATION OF SEALANT TO GASKET**

Specified sealant:

Mitsubishi genuine sealant Part No. 997740 or equivalent

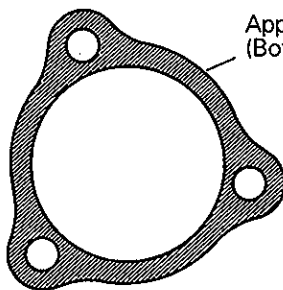


V5MT1-3, 6



Apply sealant

TRM0276

Apply sealant
(Both sides)

TRM0105

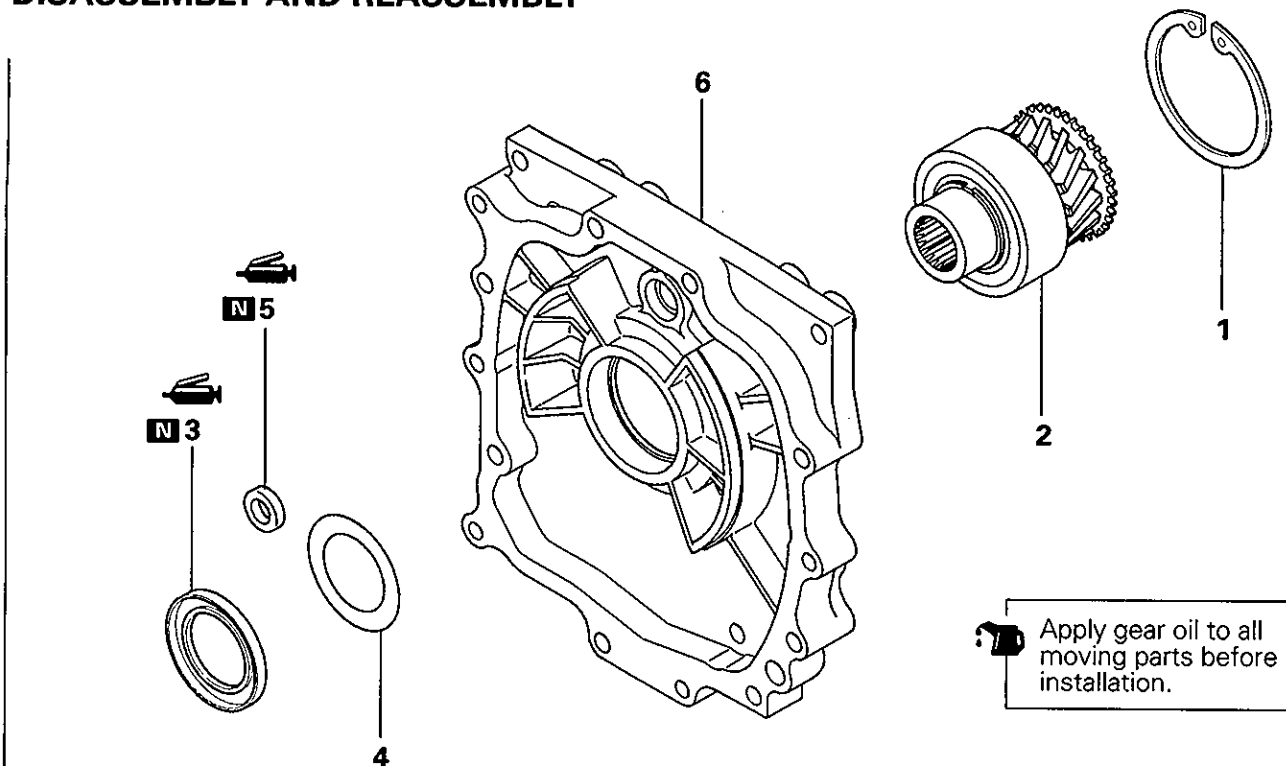
**APPLICATION OF SEALANT TO CONTROL HOUSING
COVER GASKET****Specified sealant:****Mitsubishi genuine sealant Part No. 997740 or equivalent**

NOTES

18. TRANSFER CASE PLATE

DISASSEMBLY AND REASSEMBLY

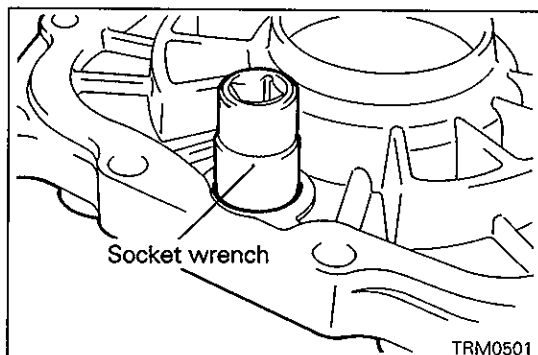
V5MT1-8



Disassembly steps

- ◆C◆ 1. Snap ring
- 2. Transfer input gear
- ◆B◆ 3. Oil seal
- 4. Baffle plate
- ◆A◆ 5. Oil seal
- 6. Transfer case plate

TRM1359



TRM0501

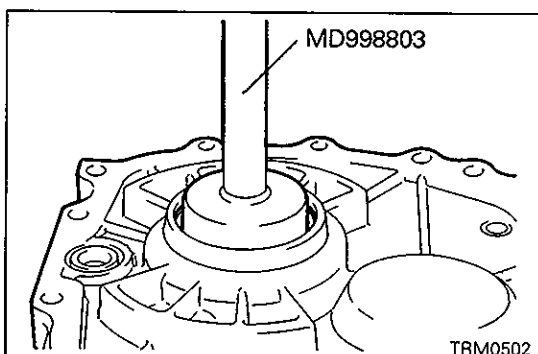
SERVICE POINTS OF REASSEMBLY

◆A◆ INSTALLATION OF OIL SEAL

- (1) Use a socket wrench or the like to install the oil seal. After installing, apply grease to the lip of the oil seal.

Specified grease:

Mitsubishi genuine grease Part No. 0101011 or equivalent



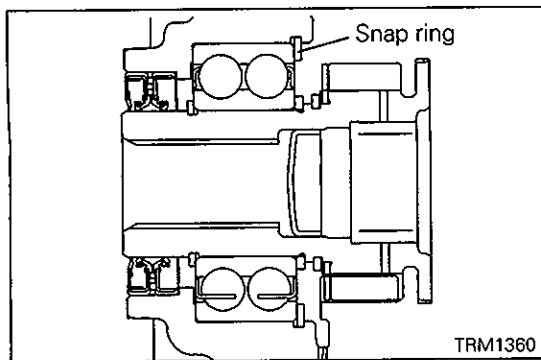
TRM0502

◆B◆ INSTALLATION OF OIL SEAL

- (1) After installation, apply grease to the lip of the oil seal.

Specified grease:

Mitsubishi genuine grease Part No. 0101011 or equivalent



❖C❖ INSTALLATION OF SNAP RING

- (1) Select the thickest snap ring that will fit into the groove and install it.

Standard value: 0 – 0.06 mm (0 – 0.0024 in.)

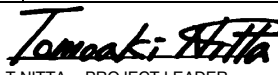
Service Bulletins

Click on the applicable bookmark to select the Service Bulletin.



SERVICE BULLETIN

QUALITY INFORMATION ANALYSIS
OVERSEAS SERVICE DEPT. MITSUBISHI MOTORS CORPORATION

SERVICE BULLETIN		No.: MSB-00E22-501	
		Date: 2000-08-31	<Model> (EC)PAJERO (L040,L140)
Subject: CORRECTION TO TORQUE VALUE AND SPECIAL TOOL NOS. FOR V5MT1 MANUAL TRANSMISSION		<M/Y> 90-10	
Group: MANUAL TRANSMISSION		Draft No.: 99MT670716	
INFORMATION/ CORRECTION	INTERNATIONAL CAR ADMINISTRATION OFFICE	 T.NITTA - PROJECT LEADER AFTER SALES SERVICE & CS PROMOTION	

1. Description:

This Service Bulletin informs you that the torque value and the special tool numbers have been corrected for the V5MT1 manual transmission.

2. Applicable Manuals:

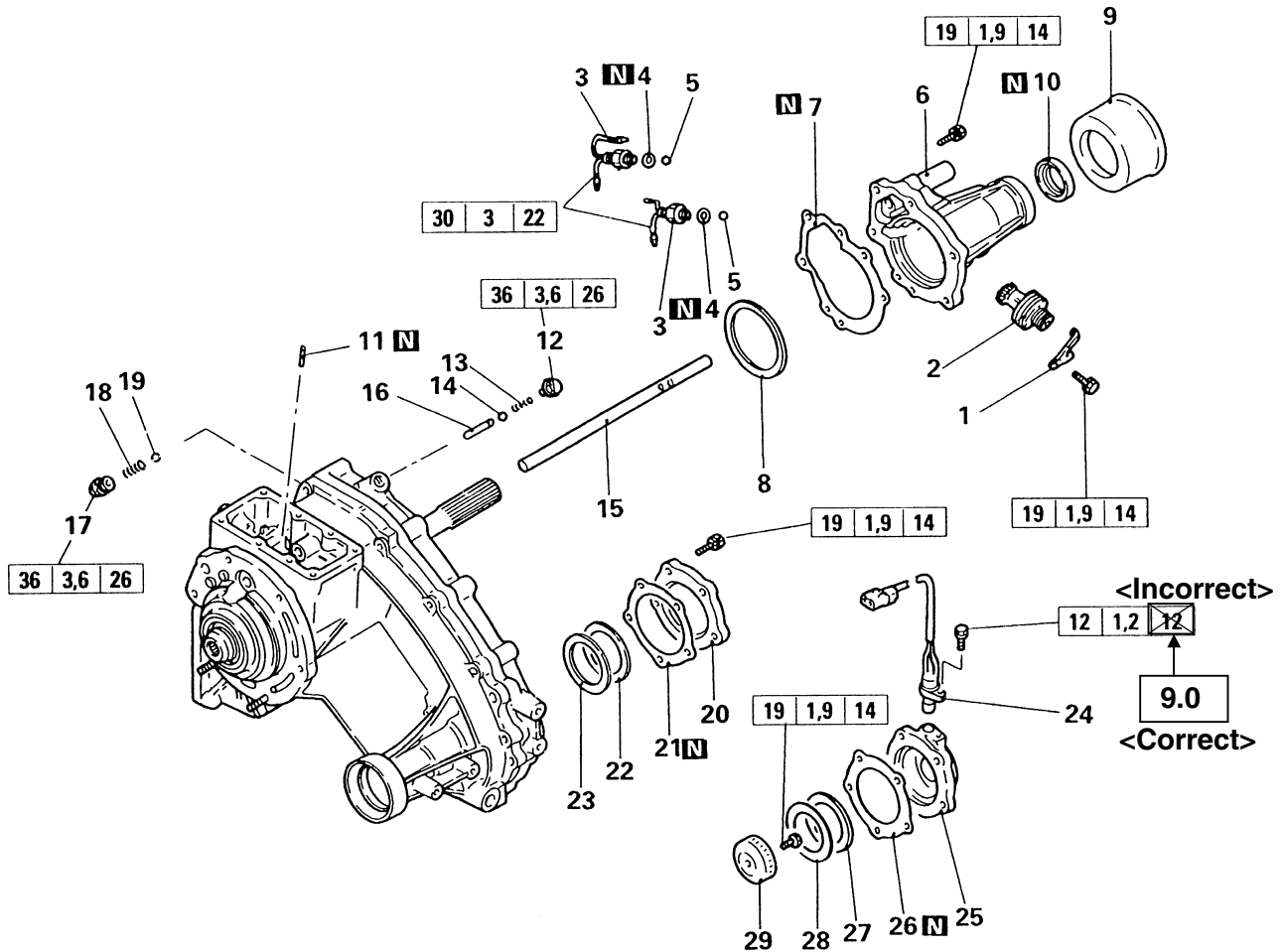
Manual	Pub. No.	Language	Page(s)
Rear wheel Drive Manual Transmission. (V5MT1)	PWEE8914	(English)	22B-7-1,
	PWES8915	(Spanish)	22B-11-1
	PWEF8916	(French)	
	PWEG8917	(German)	
	PWED8918	(Dutch)	
	PWEW8919	(Swedish)	
	PWEI8914	(Italian)	

3. Details:

Manual Transmission - Transfer (Page 2)
Manual Transmission - Front Output Shaft (Page 3)

7. TRANSFER

V5MT1-1,2



TRM0092

Disassembly steps

- Y← 1. Sleeve damp
 →W← 2. Speedometer gear
 →W← 3. 4WD indicator light switch
 →W← 4. Gasket
 →U← 5. Steel ball
 →d← 6. Rear cover
 →Z← 7. Rear cover gasket
 →Z← 8. Spacer
 →U← 9. Dust seal guard
 →d← 10. Oil seal
 →Z← 11. Spring pin
 →Z← 12. Spring plug
 →Z← 13. Poppet spring
 →Z← 14. Steel ball
 ←A→ →O← 15. H-L shift rail
 →Z← 16. Interlock plunger
 →Z← 17. Poppet plug
 →Z← 18. Poppet spring

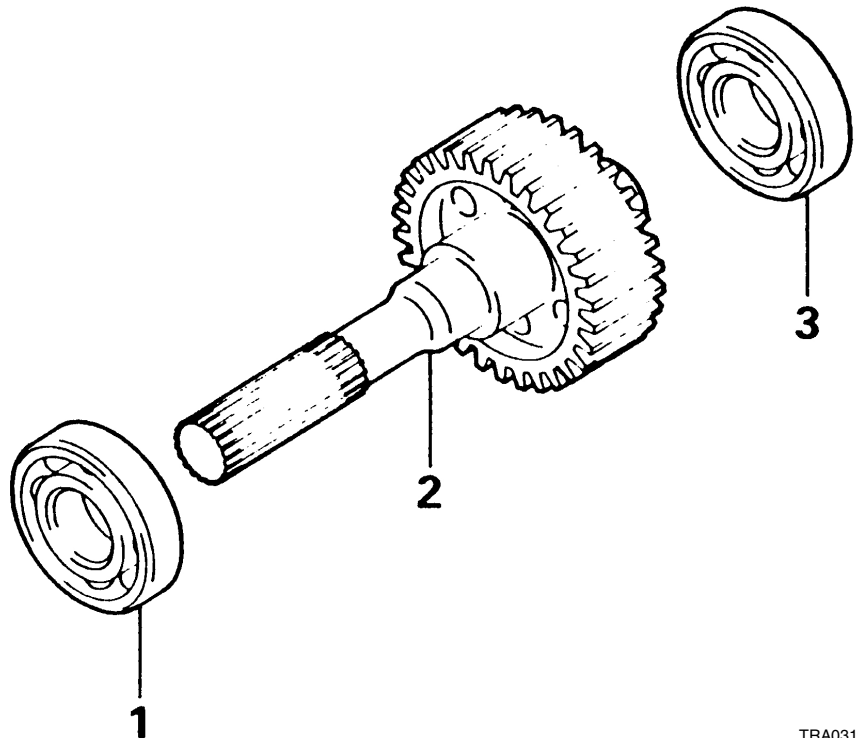
- R← 19. Steel ball
 →R← 20. Cover
 →R← 21. Cover gasket
 →R← 22. Spacer
 →R← 23. Wave spring
 →R← 24. Pulse generator
 →R← 25. Cover
 →R← 26. Cover gasket
 →R← 27. Spacer
 →R← 28. Wave spring
 →R← 29. Pulse
- V5MT1-1-AFS only

11 FRONT OUTPUT SHAFT

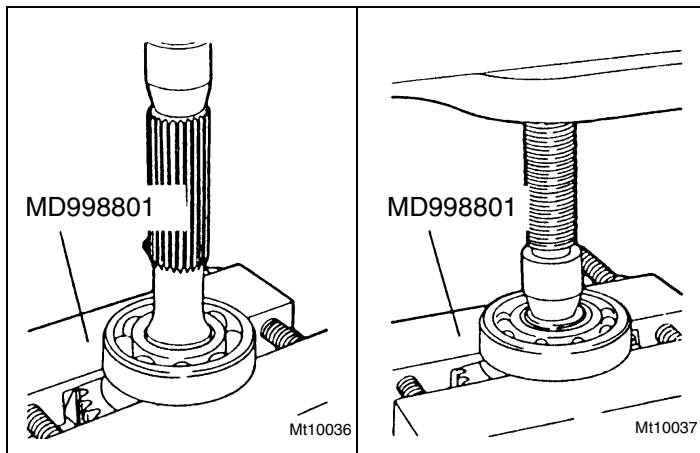
Disassembly steps

←A→ →A←
←A→ →A←

1. Ball bearing
2. Ball bearing
3. Front output shaft



TRA0319



SERVICE POINT OF DISASSEMBLY

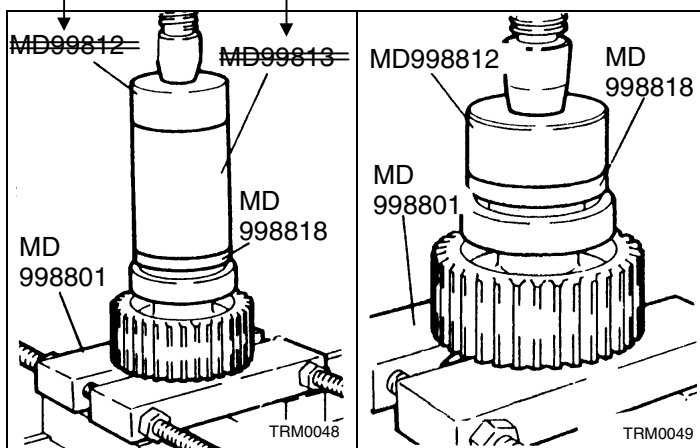
←A→ REMOVAL OF BALL BEARING

<Correct>

MD998812

<Correct>

MD998813



SERVICE POINT OF REASSEMBLY

→A← INSTALLATION OF BALL BEARING