



Parts Replacement Manual Supplement for Dodge® Torque-Arm II® Tapered Bushed 20:1 Ratio Speed Reducers

TA0107L20 TA3203H20
TA1107H20 TA4207H20
TA2115H20 TA521H20

These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see dodgeindustrial.com for updated instruction manuals.

WARNING: To ensure the drive is not unexpectedly started, turn off and lock-out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

WARNING: All products over 25 kg (55 lbs) are noted on the shipping package. Proper lifting practices are required for these products.

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Dodge nor are the responsibility of Dodge. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

NOTE: These reducers are compatible with the Dodge Ability Smart Sensor that can be installed in the adapter plug labelled "smart sensor". The plug and sensor can be moved to different locations as required by mounting positions.

Table 1 - Parts for TA0107L thru TA5215H Taper Bushed 20:1 Double Reduction Reducers

Ref.	Description	Qty.	TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H
1	1 Housing-LH	1	900202A	901202A	902202	903202	904202	905202
2	Housing-RH	1	900203	901203	902203	903203	904203	905203
①	RTV Sealant, Tube	1	415112-80-H	415112-80-H	415112-80-H	415112-80-H	415112-80-H	415112-80-H
4	Housing Bolt	14	032018012BJ	032018012BJ	411412	411412	411460	411460
5	Flat Washer	28	900241	900241	902241	902241	904241	904241
6	Nut	14	407085	407085	407087	407087	407091	407091
7	Lock-Washer	14	419010	419010	419011	419011	419013	419013
8 ①	Dowel Pin	2	901248	901248	304624	901248	304624	304624
9	Backstop Shaft Cover	1	901279P	901279P	901279P	903279P	904279P	905279P
10	Backstop Cover Gasket	1	901280	901280	901280	903280	904280	905280
11	Backstop Cover Screw	6 ②	417038	417038	417038	417038	417038	411051
12	Lock-Washer	6 ②	419045	419045	419045	419045	419045	419046
13	Input Oil Seal 20:1 Ratio ③	1	276173	273173	276285	276280	A73108	304932
14	Output Oil Seal	2	900286	901286	902286	A73109	904286	905286
15	Air Vent	1	900287	900287	900287	900287	904287	904287
16	Bushing	1	N/A	N/A	N/A	N/A	430079	430079
17 ①	Oil Plug	3	430031	430031	430031	430031	430035	430035
17 ①	Smart Sensor Adapter	1	966905	966905	966905	966905	966907	966907
18	Magnetic Oil Plug	1	430060	430060	430060	430060	430064	430064

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Ref.	Description	Qty.	TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H
21	Output Bearing Shim-As Required							
	.015" Shim		900263	901263	902263	903263	904263	905263
	.005" Shim		900264	901264	902264	903264	904264	905264
	.007" Shim		900265	901265	902265	903265	904265	905265
22	Input Bearing Shim-As Required							
	.015" Shim		900271	901271A	902271	903267	903267	905271
	.005" Shim		900272	901272A	902272	903268	903268	905272
	.007" Shim		900273	901273A	902273	903269	903269	905273
41	Counter-Shaft Bearing Shim-As Required							
	.015" Shim		900267	901267	901271	903267	903267	905271
	.005" Shim		900268	901268	901272	903268	903268	905272
	.007" Shim		900269	901269	901273	903269	903269	905273
23	Output Gear	1	900208	901208	902208	903208	904208	905208
26	Output Hub	1	900230	901230	902230	903230	904230	905230
27	Output Gear Key	1	900275	901275	901275	903275	904275	905275
28	Input Pinion Key 20:1 Ratio ③	1	443634	443634	902277	A73176	904277	905277
29	Input Pinion 20:1 Ratio ③	1	963081A	963083A	963085	963087	963089	963091
38	First Stage Gear 20:1 Ratio ③	1	963080	963082	963084	963086	963088	963090
39	Counter-Shaft Pinion	1	900209	901209	902209	903209	904209	905209
40	First Stage Gear Key	1	900276	901276	902276	903276	904276	905276
600	Backstop Assembly 20:1 Ratio	1	901102	901102	902102	903102	904102	905102
100	Torque-Arm Adapter Bracket	2	900500P	901500P	902500P	903500P	904500P	905500P
	Torque-Arm Rod Kit ④	1	964263	964263	A73091	A73091	964268	964268
101	⑤ Torque-Arm Rod End	1	A73092	A73092	A73087	A73087	A73146	A73146
102	⑤ Torque-Arm Extension	1	A73085	A73085	A73088	A73088	A73148	A73148
103	⑤ Torque-Arm Turnbuckle	1	A73086	A73086	A73089	A73089	A73147	A73147
104	⑤ RH Nut	1	407122	407122	407295	407295	033102022AB	033102022AB
105	⑤ LH Nut	1	A73261	A73261	A73262	A73262	A73263	A73263
106	Torque-Arm Bushing	1	242243	242243	243243	243243	245243	245243
107	Torque-Arm Fulcrum	1	241249	241249	243249	243249	246249	246249
108	Torque-Arm Bolt	1	411412	411412	411437	411437	411460	411460
109	Torque-Arm Lock-Washer	1	419011	419011	419012	419012	419013	419013
110	Torque-Arm Nut	1	407087	407087	407089	407089	407091	407091
111	Torque-Arm Bolt	1	411456	411456	032018016EJ	032018016EJ	032018016EJ	032018016EJ
112	Torque-Arm Nut	1	407091	407091	407093	407093	407093	407093
200	Bushing Back-Up Plate	2	241266	901301	243308	903301	904301	905301
203	Retaining Ring	2	421111	901304	421109	903304	421107	421055
204	Bushing Cap Screw	6	411405	411390	032018009CJ	032018010CJ	032018010CJ	411456
205	Bushing Lock-Washer	6	419010	419010	419011	419011	419011	419013
24	Output Bearing Cup	2	900250	901250	403003	903252	403016	403140
25	Output Bearing Cone	2	900251	901251	402003	402268	402193	402050
30	Input Bearing Cup-LH 20:1 Ratio ③	1	403166	402169	403094	304809	304809	403005
31	Input Bearing Cup-RH 20:1 Ratio ③	1	403165	403063	403094	403101	904256	403005
32	Input Bearing Cone-LH 20:1 Ratio ③	1	402284	402294	304753	411626-05-K	411626-05-K	304717
33	Input Bearing Cone-RH 20:1 Ratio ③	1	402265	402108	304707	402271	904257	402001
34	Counter-Shaft Bearing Cup-LH	1	304833	403165	304836	403101	304809	403005
35	Counter-Shaft Bearing Cup-RH	1	304833	403165	304836	403101	304809	403005
36	Counter-Shaft Bearing Cone-LH	1	304740	402265	411626-05-B	402271	304710	402001
37	Counter-Shaft Bearing Cone-RH	1	304740	402265	411626-05-B	402271	304710	402001
44	Auxiliary Output Seal	2	900286	901236	902286	A73109	904236	905286
45	Auxiliary Input Seal 20:1 Ratio ③	1	442023	442023	902238	903238	904238	905238

Table 1 - Parts for TA0107L thru TA5215H Taper Bushed 20:1 Double Reduction Reducers

Ref.	Description	Qty.	TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H
400	Screw Conveyor Adapter	1	900401	901401	902401	903401	904401	905401
401	Screw Conveyor Keeper Plate	1	900402	901402	902402	903402	904402	905402
402	Screw Conveyor Wedge	1	900403	901403	902403	903403	904403	905403
403	Screw Conveyor Drive Shaft							
	1-1/2" Shaft	1	900072	901072	902072	903072	N/A	N/A
	1-1/2" Shaft, Stainless Steel	1	900080	901080	902080	903080	N/A	N/A
	2" Shaft	1	900073	901073	902073	903073	904073	905073
	2" Shaft, Stainless Steel	1	900081	901081	902081	903081	904081	905081
	2-7/16" Shaft	1	900074	901074	902074	903074	904074	905074
	2-7/16" Shaft, Stainless Steel	1	900082	901082	902082	903082	904082	905082
	3" Shaft	1	900075	901075	902075	903075	904075	905075
	3" Shaft, Stainless Steel	1	900083	901083	902083	903083	904083	905083
3-7/16" Shaft	1	N/A	N/A	N/A	903076	904076	905076	
3-7/16" Shaft, Stainless Steel	1	N/A	N/A	N/A	903084	904084	905084	
404	Retaining Bolt	1	411549	411549	411549	411551	411551	411551
405	Lock-Washer	1	034017018AB	034017018AB	034017018AB	034017020AB	034017020AB	034017020AB
406	Drive Shaft Key	1	900405	901405	902405	903405	904405	905405
407	Drive Shaft Washer	1	900404	901404	902404	903404	904404	905404
408	Seal	2	900411	901411	902411	353085	904411	905411
409	Bolt	4	032018012CJ	032018012CJ	411435	411456	411456	411483
410	Lock-Washer	4	419011	419011	419012	419013	419013	34017018AB
411	Retaining Ring	1	900446	901446	902446	903446	904446	905446
412	Adjustable Packing Retainer	1	900413	901413	902413	903413	904413	905413
413	Adjustable Packing Gland Stud	2	400404	400404	400404	400404	400404	400404
414	Adjustable Packing Gland Nut	2	407202	407202	407202	407202	407202	407202
415	Sealing Rings	3	900416	901416	902416	903416	904416	905416

Notes

- ① Not shown on drawing
- ② 8 required on TA5215H
- ③ See Table 2 for actual ratio
- ④ Includes parts listed immediately below
- ⑤ Makes up assembly under which it is listed

Table 2 - ACTUAL RATIOS

Nominal Ratio 20:1	Reducer Size					
	TA0107L	TA1107H	TA2115H	TA3203H	TA4207H	TA5215H
Actual Ratio	20.327	20.306	21.647	21.763	21.818	21.706

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