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Portable screw jacks for automobiles

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Descriptors : road vehicles, private cars, jacks, thread forms

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

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Portable screw jacks for automobiles

1. Scope

This Japanese Industrial Standard specifies portable screw jacks for automobiles, hereinafter referred to as the "jack".

Remark 1: Normative references are as follows:

JIS G 3101-Rolled Steel for General Structure

JIS G 3131-Hot-rolled Mild Steel Plates, Sheets and Strip

JIS G 3505-Low Carbon Steel Wire Rods

JIS G 5501-Gray Iron Castings

JIS G 5702-Blackheart Malleable Iron Castings

Remark 2: The unit and numerical values given in { } in this Standard are based on the traditional unit system and are appended for informative reference.

2. Type and Nominal Load (Mass)

Types and nominal loads (mass) shall be as shown in Table 1.

Table 1

Unit: t

Type	Nominal load (mass)
Ordinary type jack	0.7, 1, 1.5, 2, 3, 4, 5, 7, 10
Bumper jack	0.25, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 1
Body jack	0.25, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 1
Pantagraph type jack	0.25, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 1

Remarks 1. Each of the nominal loads (mass) of the pantagraph jack shows the case where the hook is above the middle of the lift.

2. The nominal load (mass) may be indicated in kg unit.

3. Names and Materials of Main Parts

The names and materials of main parts shall be as shown in the Attached Figs. 1 to 4 as a rule.

4. Construction

The construction of jack shall be as shown in the Attached Figs. 1 to 4 as a rule.

5. Maximum Working Loads (Mass) and Dimensions

5.1 Ordinary Type Jack The maximum working loads (mass) and dimensions of ordinary type jacks shall be as shown in Table 2.

Table 2

Unit: mm

Nominal load (mass) (t)	Maximum working load (mass) (kg)	Lift		Height at the reduction time (max.)	Informative		
		With auxiliary screw (min.)	Without auxiliary screw (min.)		Mass of body (max.) (kg)	Radius of gyration of handle	Operating force of handle (max.) [N (kgf)]
0.7	700	80	130	280	10	150	196 (20)
1	1000						
1.5	1500						
2	2000	100	130	280	10	150	196 (20)
3	3000						
4	4000						
5	5000	120	150	280	20	200	196 (20)
7	7000						
10	10000						

Remark: The mass of body is exclusive of that of the handle.

5.2 Bumper Jack and Body Jack The maximum working loads (mass) and dimensions of the bumper jack and body jack shall be as shown in Table 3.

Table 3

Unit: mm

Nominal load (mass) (t)	Maximum working load (mass) (kg)	Lift (min.)	Height at the reduction time (max.)	Informative		
				Mass of body (max.) (kg)	Radius of gyration of handle	Operating force of handle (max.) [N (kgf)]
0.25	250	250	300	10	200	196 (20)
0.3	300					
0.4	400					
0.5	500					
0.6	600					
0.7	700					
0.8	800					
1	1000					

Remarks 1. The height at the time of reduction means the height up to the hook at the lowest place of lift.

2. The mass of body is exclusive of that of the handle.