

OPERATOR'S SAFETY AND SERVICE MANUAL



R420

This manual covers the following serial numbers
and higher for each model listed:

420R	4200395
420H	4250487
420HC	4271101



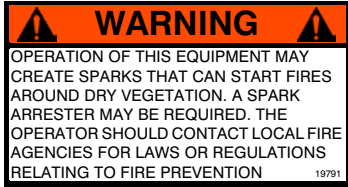
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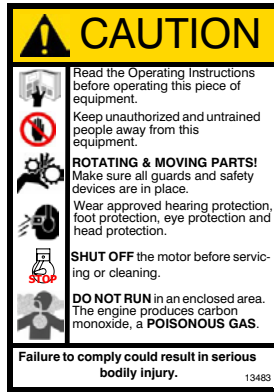
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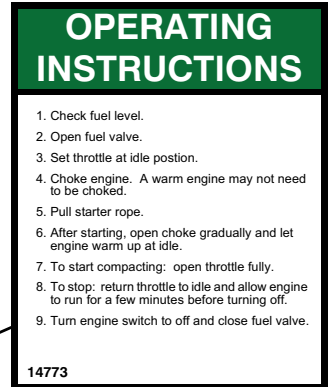
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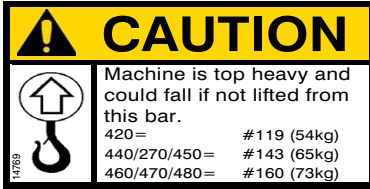
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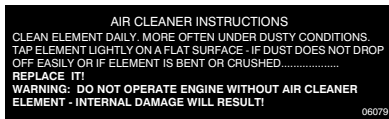
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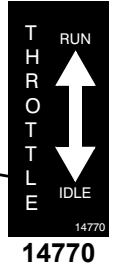
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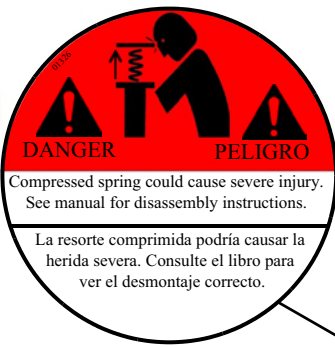
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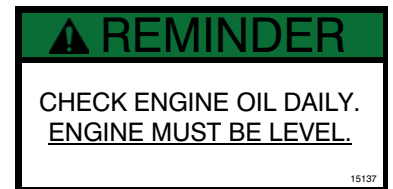
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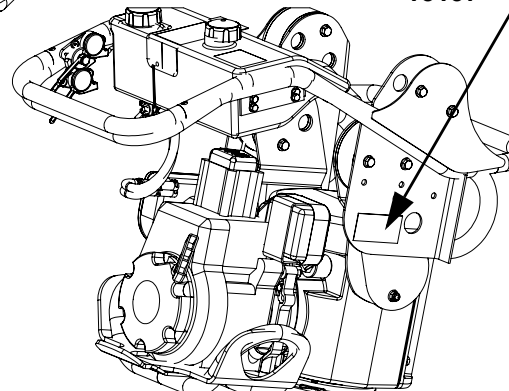
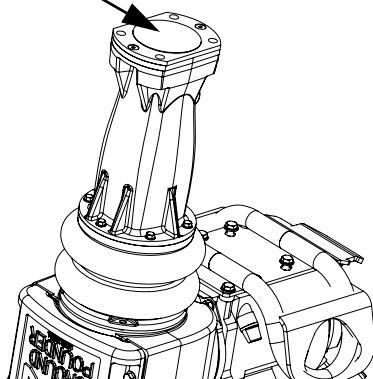
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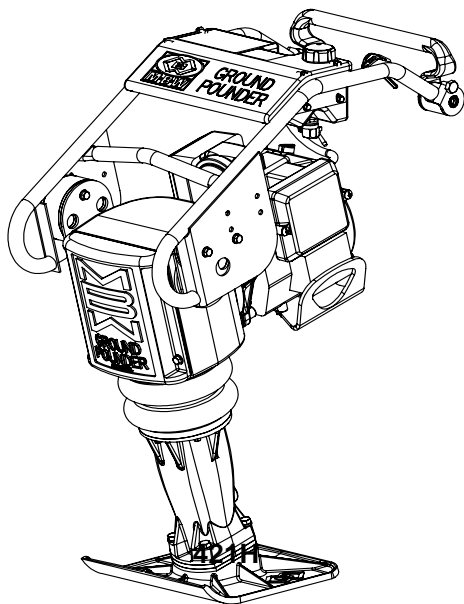


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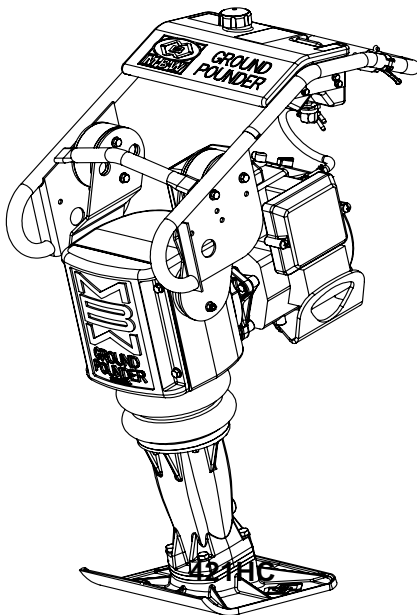


Safety Decals (Decal Set #17777)

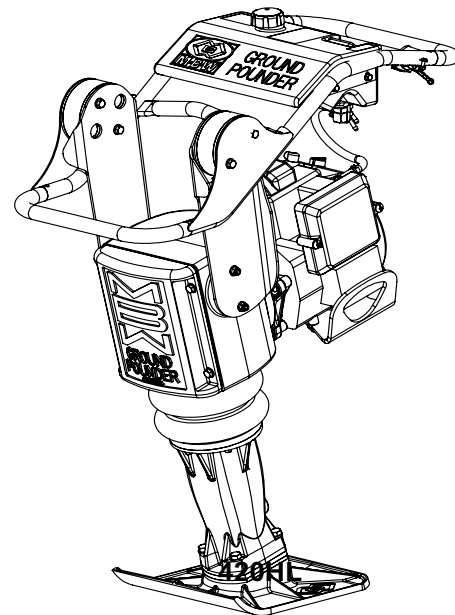
SPECIFICATIONS



420/421H



420/421HC



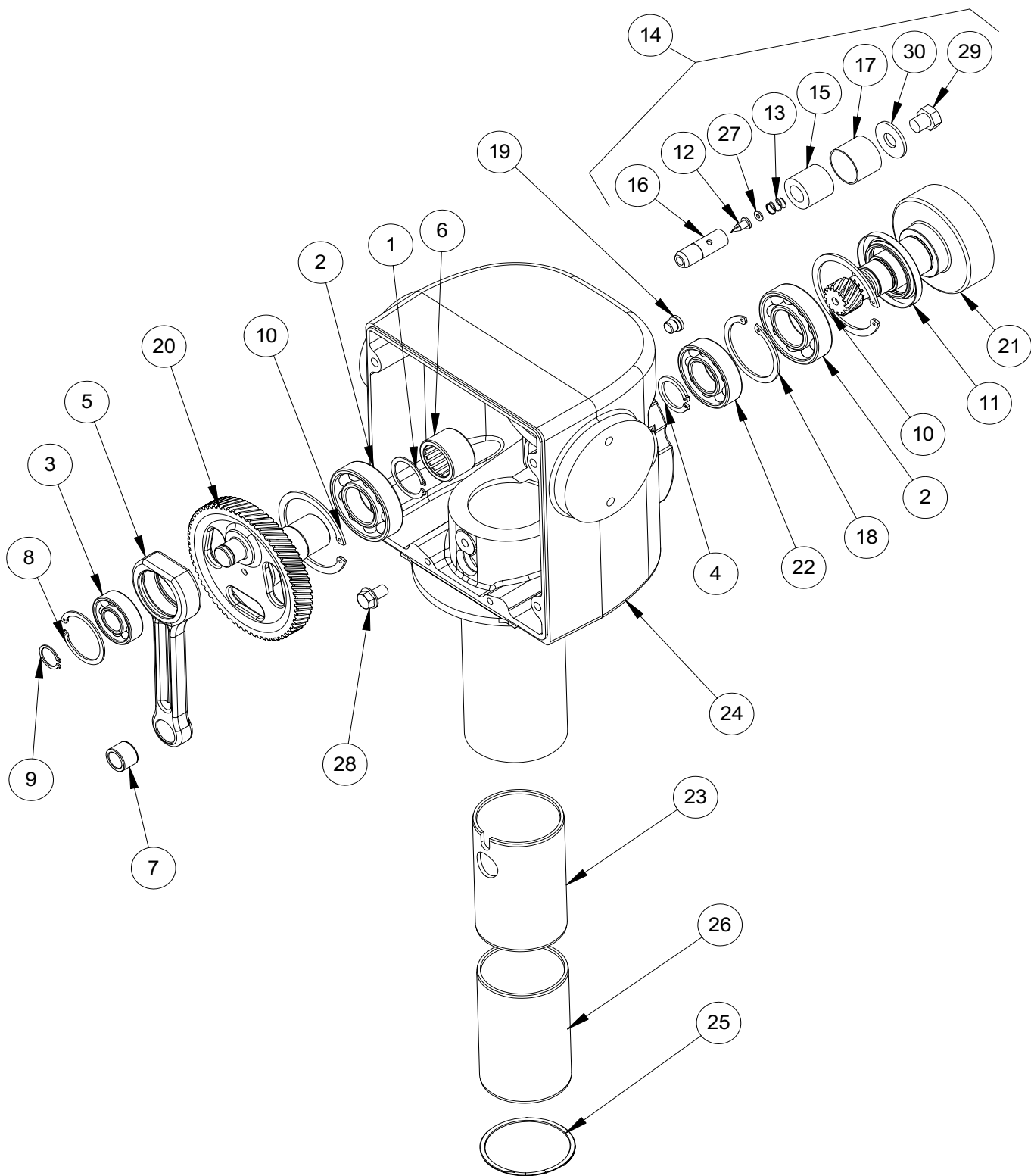
420/421HL

	420H/420HC	421H/421HC	420HL	421HL
Operating Weight - lbs(kg)	126 (57)	135 (61)	134 (60.8)	141 (64)
Height - in(cm)	38.25 (97.2)	38.25 (97.2)	38.25 (97.2)	38.25 (97.2)
Width - in(cm)	14.25 (36.2)	14.25 (36.2)	14.25 (36.2)	14.25 (36.2)
Length - in(cm)	26.88 (68.3)	26.88 (68.3)	28.25 (71.8)	28.25 (71.8)
Engine	Honda GX100	Honda GX100	Honda GX100	Honda GX100
Shoe (W x L) in (cm)	10 x 11.5 (25.4 x 29.2)	11 x 13 (28 x 33)	10 x 11.5 (25.4 x 29.2)	11 x 13 (28 x 33)
Operating Noise Level¹ dBA	93 dBA	93 dBA	93 dBA	93 dBA
Travel Speed ft/min(m/min)	55 (16.8)	55 (16.8)	55 (16.8)	55 (16.8)
Compaction Area sqft/hr (sqm/hr)	2772 (257)	2772 (257)	2520 (234)	2520 (234)
Percussion Rate blows/min	up to 720	up to 720	up to 720	up to 720
Engine Speed rpm	3500-3600	3500-3600	3500-3600	3500-3600
Fuel Capacity - gal(L)	1.1 (4.2)	1.1 (4.2)	1.1 (4.2)	1.1 (4.2)
Gearbox Oil Capacity ounces(L)	10 (0.3)	10 (0.3)	10 (0.3)	10 (0.3)
Engine Oil Capacity ounces(L)	9.6 (0.28)	9.6 (0.28)	9.6 (0.28)	9.6 (0.28)

Specifications subject to change without notice

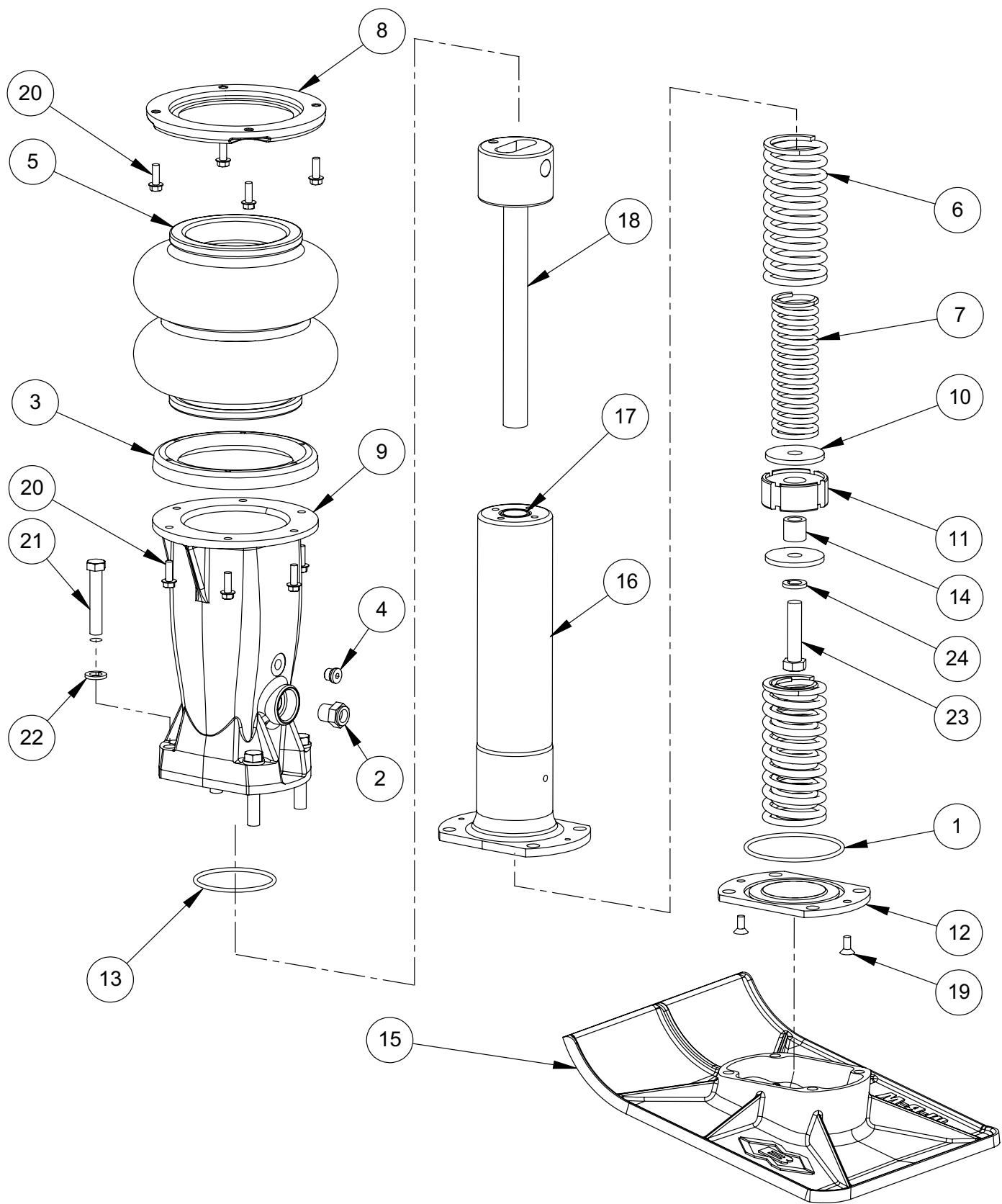
1. Noise levels are taken at the operating position and are based on operating conditions. Background noise will increase noise levels.
2. Noise level is operating on loose gravel surface. Hearing protection may be needed.
3. Not all product variations shown.

- No universal method or formula has been accepted for determining "Compaction Force". All manufactures employ their own method or formula.



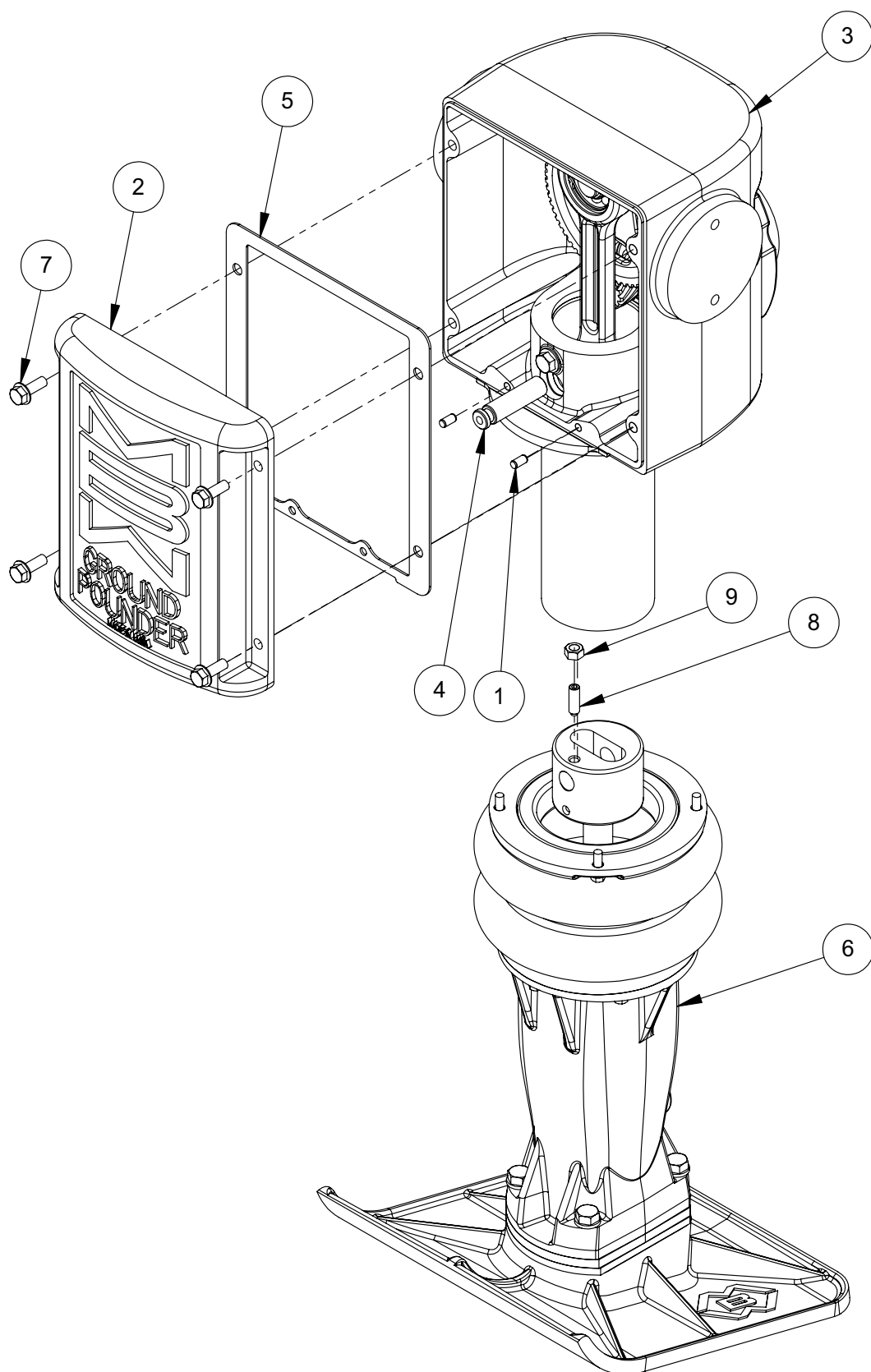
Gearbox Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	01001	RETAINING RING, EXT. 5100-137	1
2.	01103	BEARING, BALL	2
3.	01105	BEARING, BALL	1
4.	01244	RETIANING RING, EXT. 5160-112	1
5.	06161	ROD ASSEMBLY, CONNECTING	1
6.	06259	BEARING, NEEDLE	1
7.	06262	BUSHING	1
8.	06264	RETAINING RING, INT. N5000-187	1
9.	06265	RETAINING RING, EXT. 5100-78	1
10.	06266	RETINAING RING, INT. N5000-281	2
11.	06274	SEAL	1
12.	06413	VALVE	1
13.	06423	SPRING, COMPRESSION, 0.420 OD	1
14.	06904	BREATHER ASSEMBLY (Includes items 12, 13, 15, 16, 17, 29, 27, 30)	1
15.	06905	FILTER, BREATHER	1
16.	06908	TUBE, BREATHER	1
17.	06910	COVER	1
18.	09476	RETAINING RING, INT. N500-244	1
19.	09618	FITTING, PLUG PARKER 4HP50N	1
20.	13733	GEAR	1
21.	15959	PINION	1
22.	16021	BEARING, BALL	1
23.	16304	BEARING, SLIDE, CUT	1
24.	16315	GEARBOX***	1
25.	16451	RETAINING RING, INTERNAL, 3.0"	1
26.	16745	BEARING, SLIDE	1
27.	F01PW	WASHER, 5/32 X 3/8 X 18 GA ZP	1
28.	F061605FWS	FLANGE HEAD CAP SCREW, 3/8-16 X 5/8 GR5 ZP	1
29.	F081304HCS	HEX HEAD CAP SCREW, 1/2-13 X 1/2 GR5 ZP	1
30.	F08SW	WASHER, 9/16 X 1-3/8 X 12 GA ZP	1
		***INCLUDES GEARBOX TUBE. GEARBOX TUBE NOT AVAILABLE SEPARATELY.	

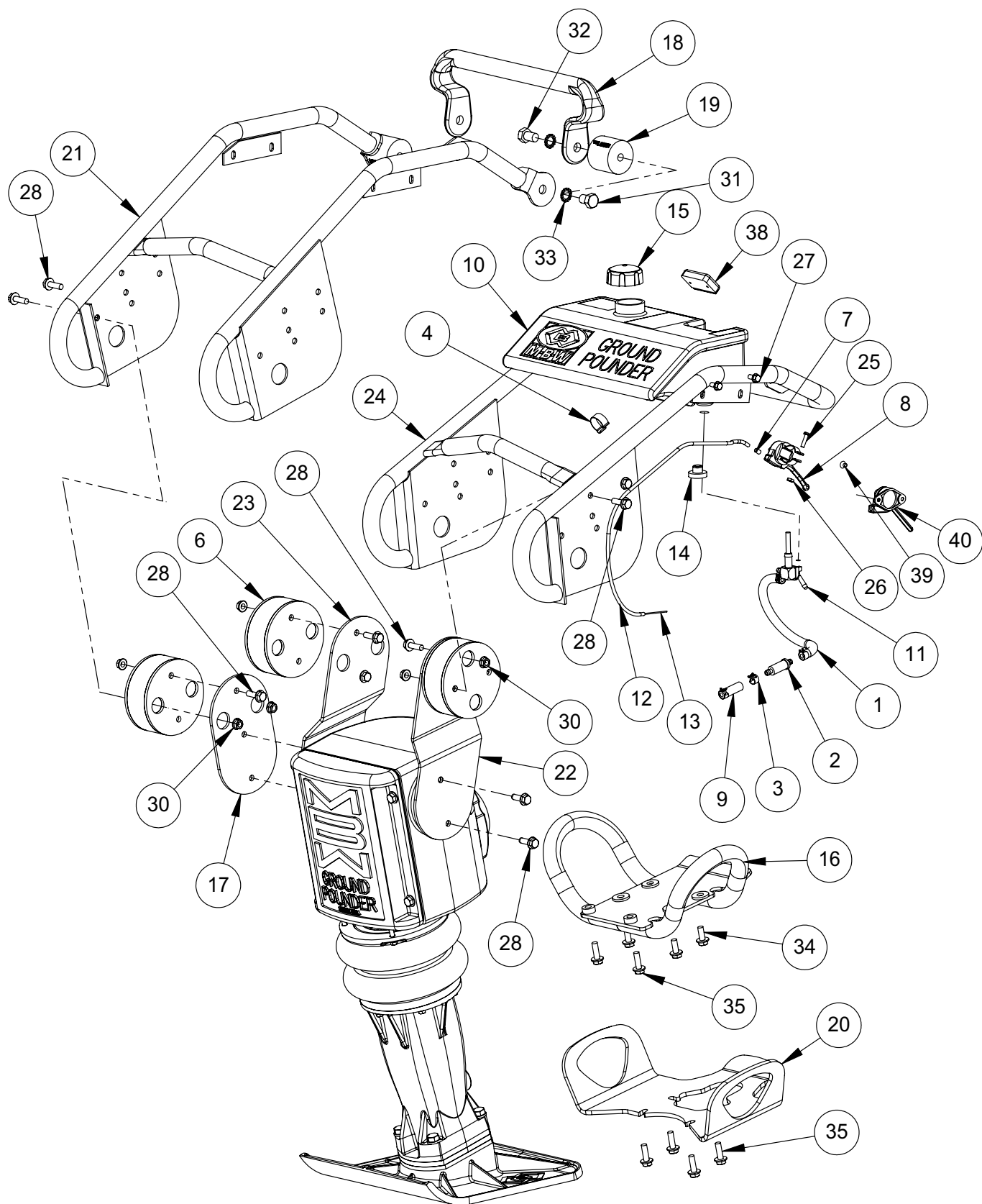


Lower Unit Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	06239	O-RING, 3.36 ID X 0.139 DIA	1
2.	06457	GAGE, VIEW	1
3.	07154	RING, CLAMPING, LOWER	1
4.	09618	FITTING, PLUG PARKER 4HP50N	1
5.	11694	BELLOWS, 4 PLY	1
6.	16305	SPRING, COMPRESSION, 2.313 OD	2
7.	16306	SPRING, COMPRESSION, 1.700 OD	2
8.	16311	RING, CLAMPING, UPPER	1
9.	16320	GUARD, SPRINGBOX	1
10.	16323	WASHER, 2.125 OD X 0.516 ID	2
11.	16324	PISTON	1
12.	16325	COVER, SPRINGBOX	1
13.	16330	O-RING, 2.72 ID X 0.139 DIAMETER	1
14.	16423	SPACER	1
15.	19618	SHOE, 11" CAST IRON (421 MODELS) (INCLUDES ITEMS #21 & 22)	1
16.	17416	SPRING BOX (INCLUDES ITEM #17 BUSHING)	1
17.	18475	BUSHING	1
	16326	BUSHING (For serial #427063-420HC, 4200387-420R, 4250661-420H and below)	1
18.	18524	SHAFT, RAM 420	1
19.	F042005FSS	FSS, 1/4-20 x 5/8"	2
20.	F042006FWS	FWLS, 1/4-20x3/4 ZP	10
21.	F072020HCS	HHCS, 7/16-20 X 2-1/2 GR5 ZP (For cast iron shoes #19618 only)	4
	F072022HCS	HHCS, 7/16-20 X 2-3/4 GR5 ZP (For aluminum shoes #17172 & 16317 only)	4
22.	F07LW	LOCKWASHER, 7/16 ZP	4
23.	F081318HCS	HHCS, 1/2-13 x 2-1/4 GR5 ZP	1
24.	F08LW	LOCKWASHER, 1/2 ZP	1
		***Prior to 420H serial no. 4250150 & 420R serial no. 4200300, order	
		replacement kit #17423 (Includes items 9,15)	
	19620	SPRING BOX ASM. (INCLUDES ITEMS 1, 6, 7, 10 thru 12, 14, 16 thru 19, 23 & 24)	

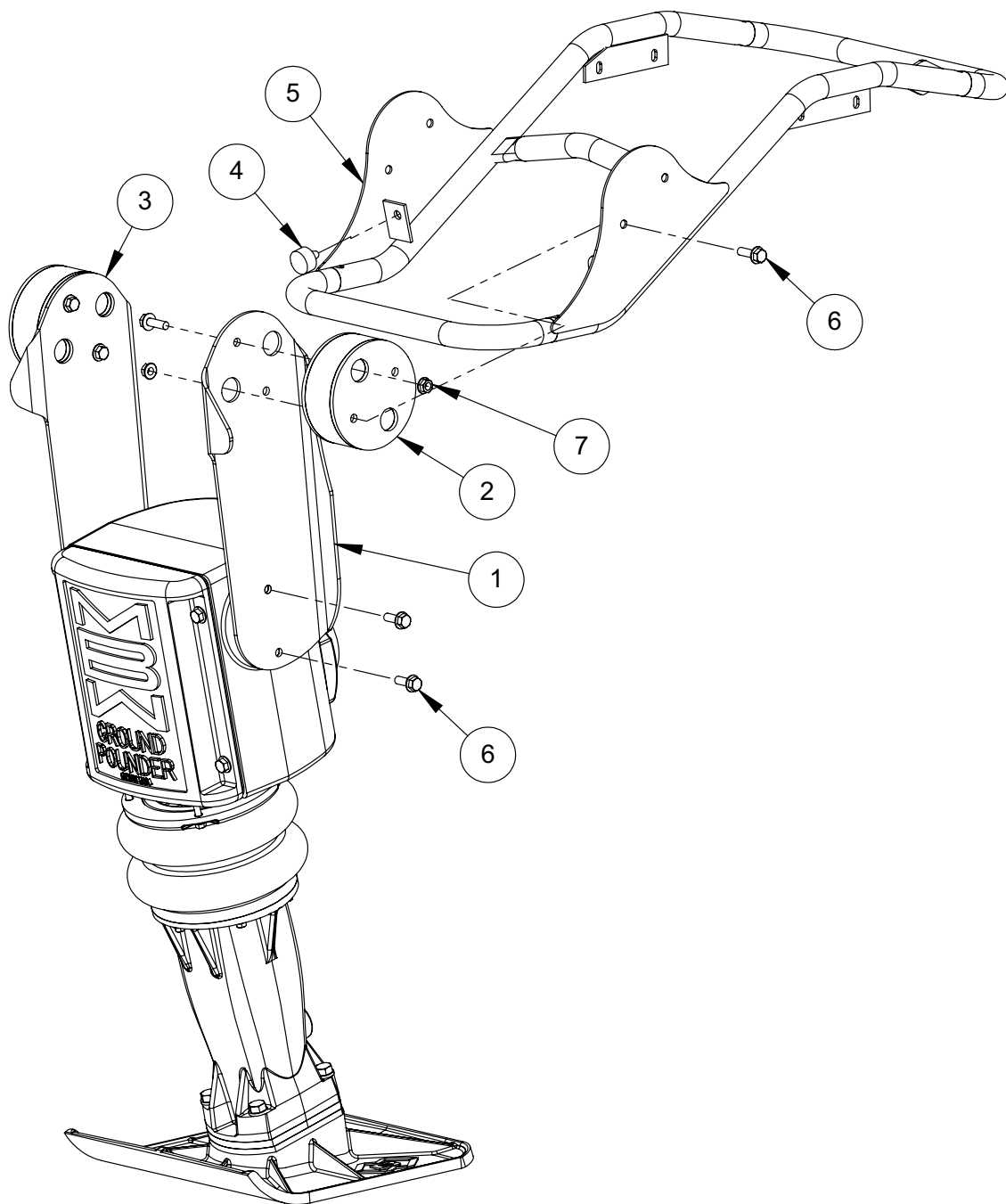


Gearbox and Lower Unit Assembly



Handle Assembly

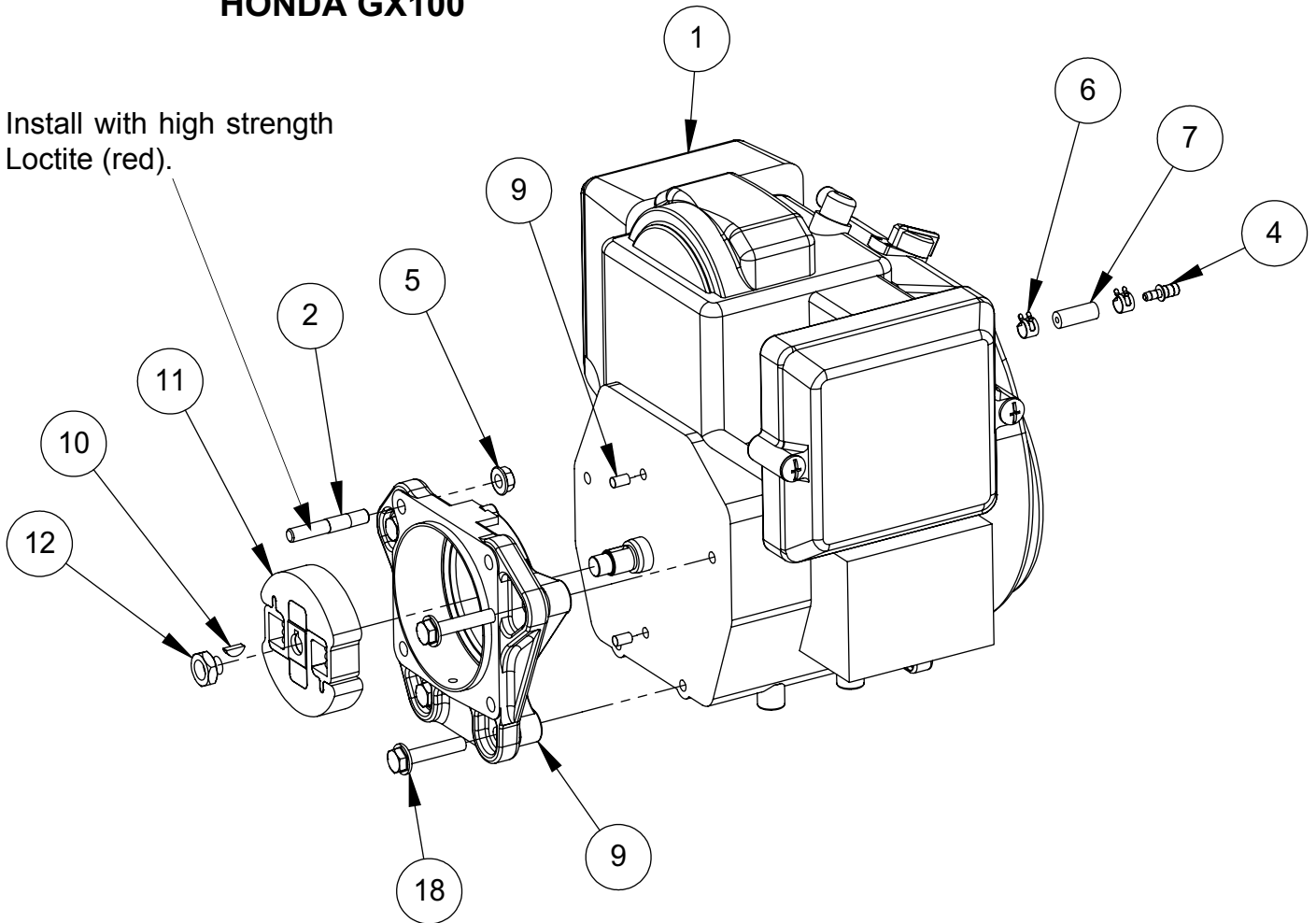
ITEM	PART NO.	DESCRIPTION	QTY
1.	01035	HOSE, FUEL 6" LONG (420H only)	1
	17720	HOSE, FUEL 7-1/2" LONG (420R and 420HC only)	1
2.	01045	FILTER, FUEL, IN-LINE	1
3.	01052	CLAMP, HOSE	4
4.	01145	CLAMP, SPRING	1
6.	07351	TORSION MOUNT	2
7.	07916	FERRULE, THROTTLE LEVER	1
8.	14715	THROTTLE, RATCHET STYLE	1
9.	15183	HOSE, FUEL 1-1/2" LONG	1
10.	16303	TANK, FUEL	1
11.	16414	VALVE, FUEL	1
12.	16572	CASING, 30" THROTTLE WIRE	1
13.	16573	WIRE, 34.5" THROTTLE	1
14.	16586	GROMMET, 1/2"	1
15.	16666	CAP, 1-3/4" (USE ON ROBIN AND HONDA FLOAT CARBURATOR ENGINES)	1
	14714	CAP, 1-3/4" (USE ON HONDA DIAPHRAGM CARBURATOR ENGINES)	1
16.	16671	GUARD, ENGINE (420R only)	1
17.	16754	BRACKET, HANDLE (420H only)	2
18.	17162	SUB-HANDLE (420H only)	1
19.	17170	SHOCKMOUNT (420H only)	2
20.	18527	GUARD, ENGINE	1
21.	18879	HANDLE (420H only)	1
22.	17477	BRACKET, HANDLE, LEFT (420R and 420HC only)	1
23.	17478	BRACKET, HANDLE, RIGHT (420R and 420HC only)	1
24.	17481	HANDLE (420R & 420HC ONLY)	1
	18881	HANDLE (420R & 420HC ONLY) SERIAL NO. (4200395 420R/4271101 420HC) AND UP	1
25.	F033206PMS	PAN HEAD MACHINE SCREW, #10-32 x 3/4" LG ZP	1
26.	F0332HN	NUT, HEX #10-32 ZP	1
27.	F042004FWS	FLANGE SCREW, 1/4"-20 x 1/2" ZP	4
28.	F051808FWS	FLANGE SCREW, 5/16"-18 x 1" ZP	12
30.	F0518FN	NUT, FLANGE 5/16"-18 ZP	8
31.	F081305HCS	HEX HEAD CAP SCREW, 1/2"-13 x 5/8" ZP	2
32.	F081306HCS	HEX HEAD CAP SCREW, 1/2"-13 x 3/4" ZP	2
33.	M12ETLW	LOCKWASHER, M12, EXTERNAL TOOTH, ZP	4
34.	M08C020FWS	FLANGE SCREW, M8-1.25 x 20MM ZP	4
35.	M08C025FWS	FLANGE SCREW, M8-1.25 x 25MM ZP	4
36.			
38.	17602	KIT, TACHOMETER	
39.	F032402FSS	FLAT HEAD SCREW, #10-24x1/4", SERIAL NO. (4200395 420R/4271101 420HC) AND UP	2
40.	18742	THROTTLE, FLANGE MOUNT, SERIAL NO. (4200395 420R/4271101 420HC) AND UP	1



Handle

HONDA GX100

Install with high strength
Loctite (red).



Engine Assembly

