



***PARTS & SERVICE MANUAL***  
***MODEL M413XT***

Document: M413XT Parts Manual Rev. 1.0

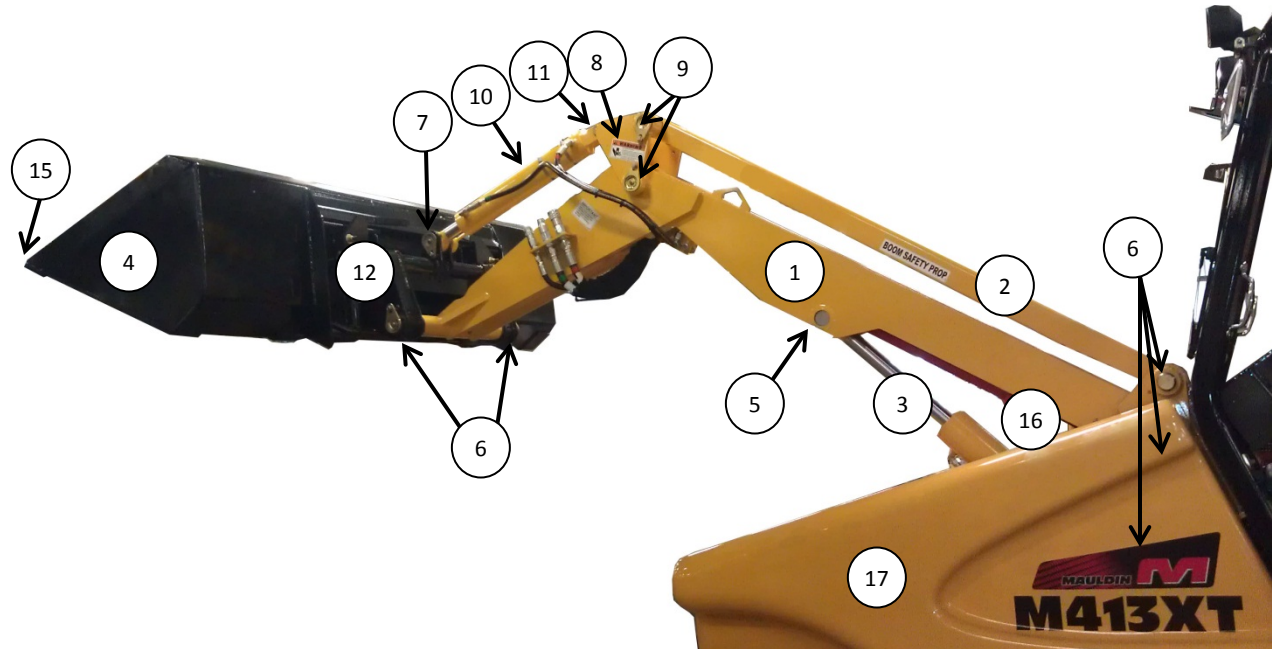
Covers Serial Number Range:

019-H-43MZP2Y4-02019 THRU \_\_\_\_\_

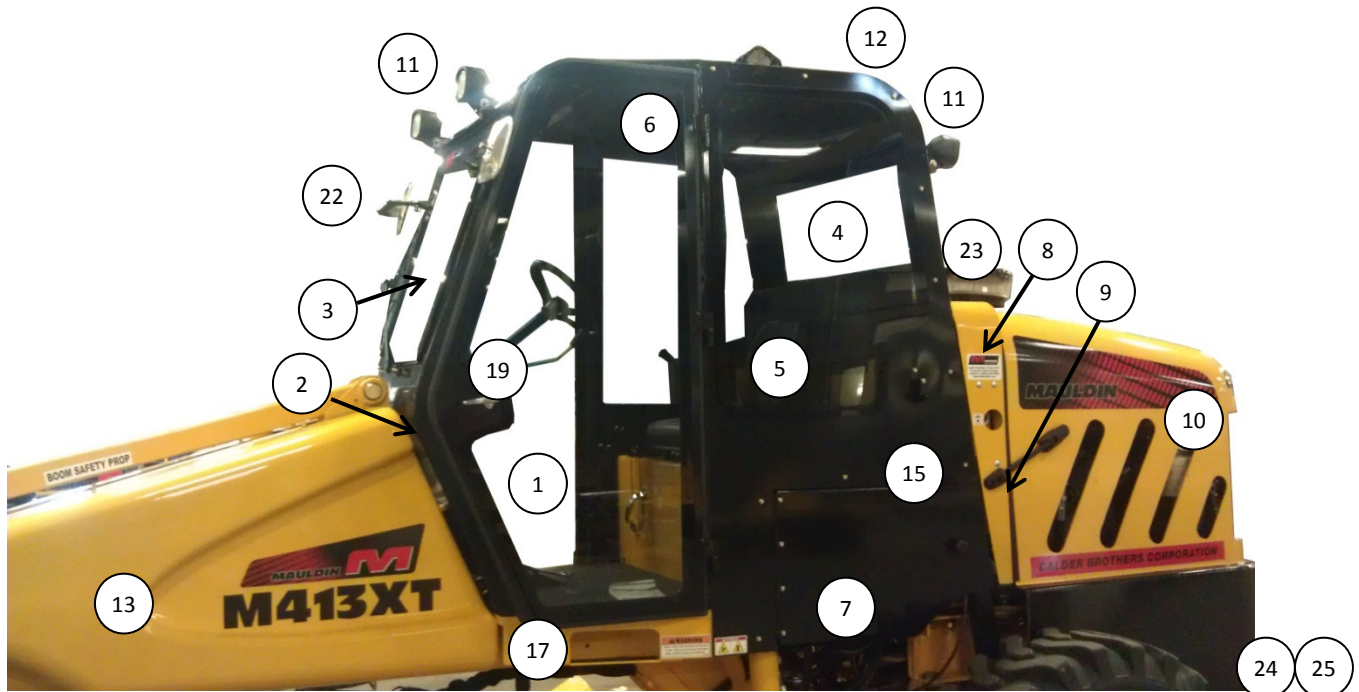
**SOLD & SERVICED BY**



Boom assembly.....	Page 2
Cab panels .....	Page 3
Cab with grader controls .....	Page 5
Cab with maintainer controls .....	Page 7
Front drive assembly .....	Page 8
Rear drive assembly .....	Page 9
Moldboard assembly .....	Page 9
Quick disconnect assembly .....	Page 12
Rear tool attachment assembly.....	Page 13
Engine right side .....	Page 14
Engine left side.....	Page 15
Engine assembly.....	Page 16
Notes .....	Page 17



1. Boom quick attach weldment.....	102-108353
2. Top link weldment .....	102-108239
3. Boom lift cylinder .....	108899
4. Bucket weldment.....	102-107301
5. Pin 2.00" x 5.00".....	103-292801
6. Pin 2.00" x 8.50" w/ flag (x5).....	102-108857
• Retaining bolt w/ spacer.....	030-0531
7. Pin 2.00" x 5.50" w/ flag.....	102-108572
• Retaining bolt w/ spacer.....	030-0531
8. Bell crank weldment .....	102-108889
9. Pin 2.00" x 11.75" w/ flag (x2).....	102-108900
• Retaining bolt w/ spacer.....	030-0531
10. Boom tilt cylinder .....	108901
11. Pin 1.00" x 3.50" .....	103-108955
12. Quick attach assembly .....	102-108893
13. Tilt indicator guide (not pictured).....	102-108943
14. Sight rod weldment (not pictured).....	102-108944
15. Bucket cutting edge weld on.....	103-107312
• Bucket cutting edge bolt on (not pictured).....	103-107312-R
16. Boom safety prop .....	293060
17. Fiber glass side panels LH .....	108097
18. Fiber glass side panels RH (not pictured).....	108093
19. Fuel tank RH (not shown).....	108952
20. Fuel tank LH (not shown) .....	108953
21. Fuel cap (not shown).....	050-0522
22. Fuel tank sender unit (not shown).....	020-0174

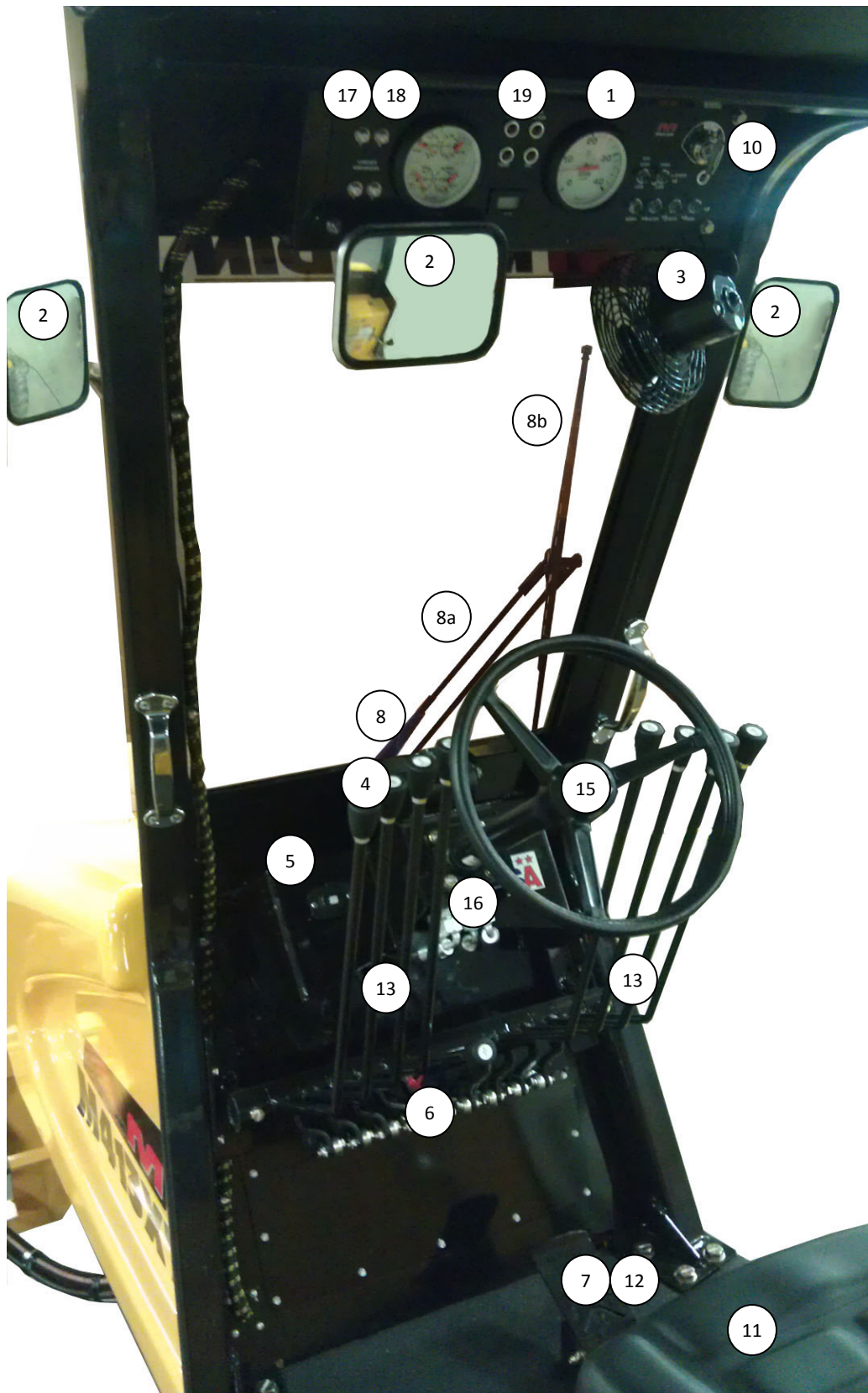


1. LH and RH door glass .....	103-140884-G
2. Cab rops.....	102-208360-1
3. Front glass pane .....	1-40878
4. Rear glass pane .....	1-40879
5. Side glass.....	1-40881-G
6. Headliner (specify sq. ft.) .....	108860-09
7. Pump access panel door.....	102-107260
• Access door threaded knob.....	86904
8. Hydraulic tank cover.....	102-208350
9. Hood latch.....	050-0137
10. Hood.....	108130
11. Headlight (x4).....	020-0491
12. Rotating beacon light .....	020-0168
13. Fiber glass side panels LH.....	108097
14. Fiber glass side panels RH (not pictured).....	108093
15. Cab side panel LH (w/o glass) .....	102-208330-01
16. Cab side panel RH (w/o glass).....	102-208330-02
17. Door frame LH (w/ glass) .....	101-208320
18. Door frame RH (w/ glass).....	101-208321
19. Lockable handle .....	050-061085
• Door pull handle .....	093-0318
• Door pull handle knob .....	050-0388
20. Weather stripping doors (specify length).....	3-16955
21. Floor mat material (specify sq. ft.).....	108860-10

**M413XT**

**Cab panels**

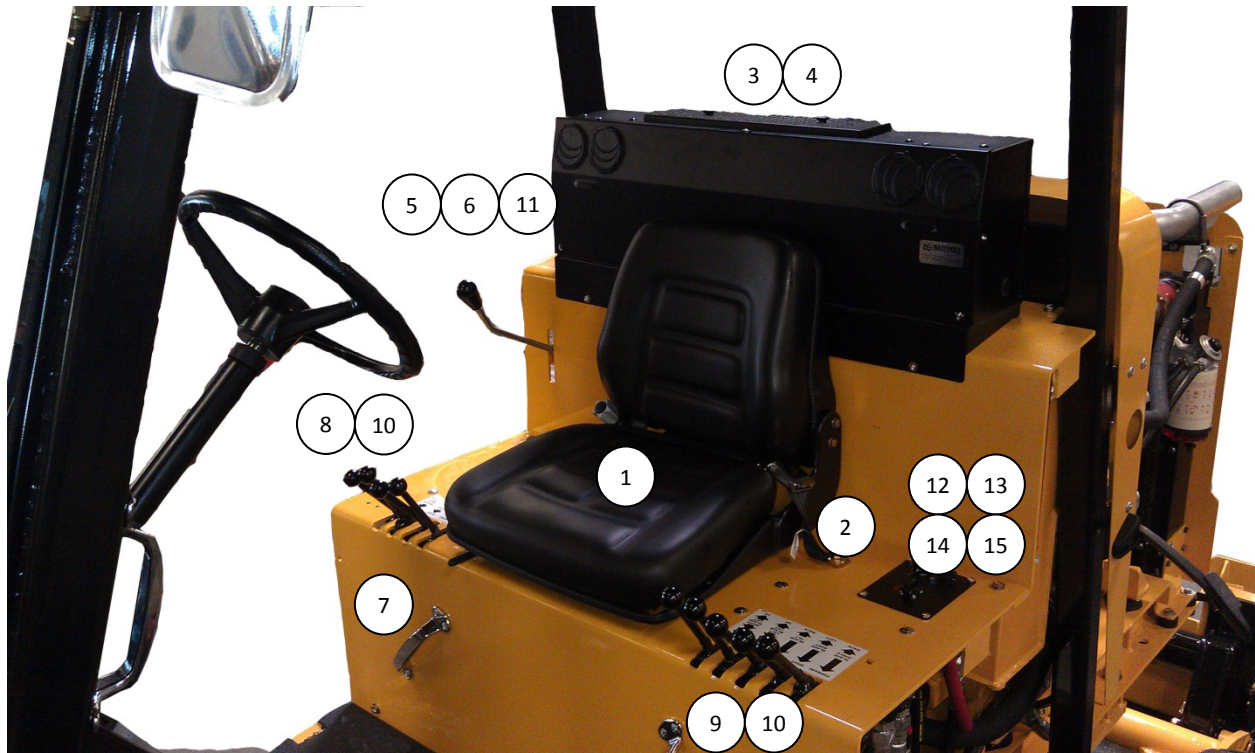
22. Mirrors .....	107267
• Mirror mounting bracket LH .....	103-107268
• Mirror mounting bracket RH .....	103-107268
23. Air filter pre-cleaner .....	622404-1
24. Hood mounting adjustment bracket .....	103-107258
25. Hood mounting bracket .....	103-107266



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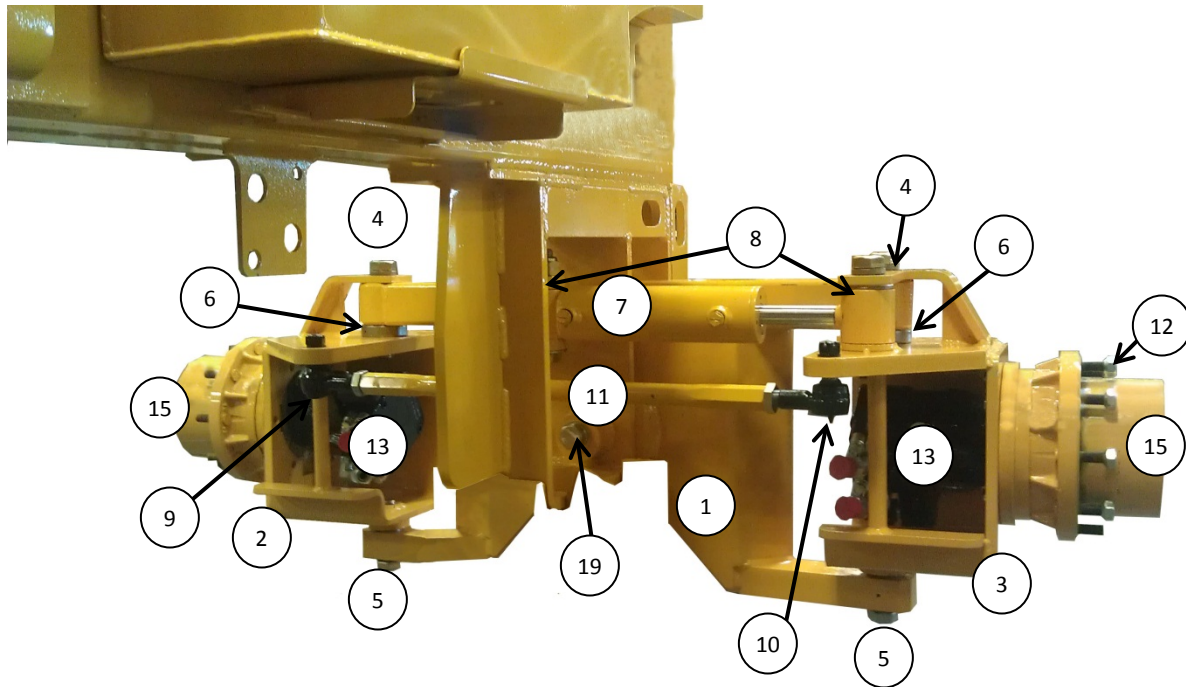
1. Dash instrument panel assembly .....	062-103068
2. Mirrors .....	107267
a. Mirror mounting bracket LH .....	103-107268
b. Mirror mounting bracket RH.....	103-107268
3. Fan defrost 12v assembly .....	108960-02
4. Grader control lever knob (x9).....	050-0434
5. DC power outlet (12v) .....	103-108970
6. Pin plunger auxiliary locker .....	030-0522
7. Foot pedal weldment.....	102-108727-01
8. Wiper motor (front).....	108601-5
a. Wiper arm (front) .....	108601-6
b. Wiper blade (front) .....	108601-7
9. Wiper motor (rear)(not pictured).....	108601-1
a. Wiper arm (rear)(not pictured) .....	108601-2
b. Wiper blade (rear)(not pictured).....	108601-3
10. Spare key .....	020-0087
11. Seat .....	060-0049
12. Foot pedal cable .....	103-208125
13. Grader control handle weldment .....	109058
14. Safety grab handles .....	050-0205
15. Steering wheel .....	108153
16. Orbital.....	107214
17. 30 amp breaker.....	E0128
18. 15 amp breaker.....	E0128-1
19. Red indicator light .....	020-0140





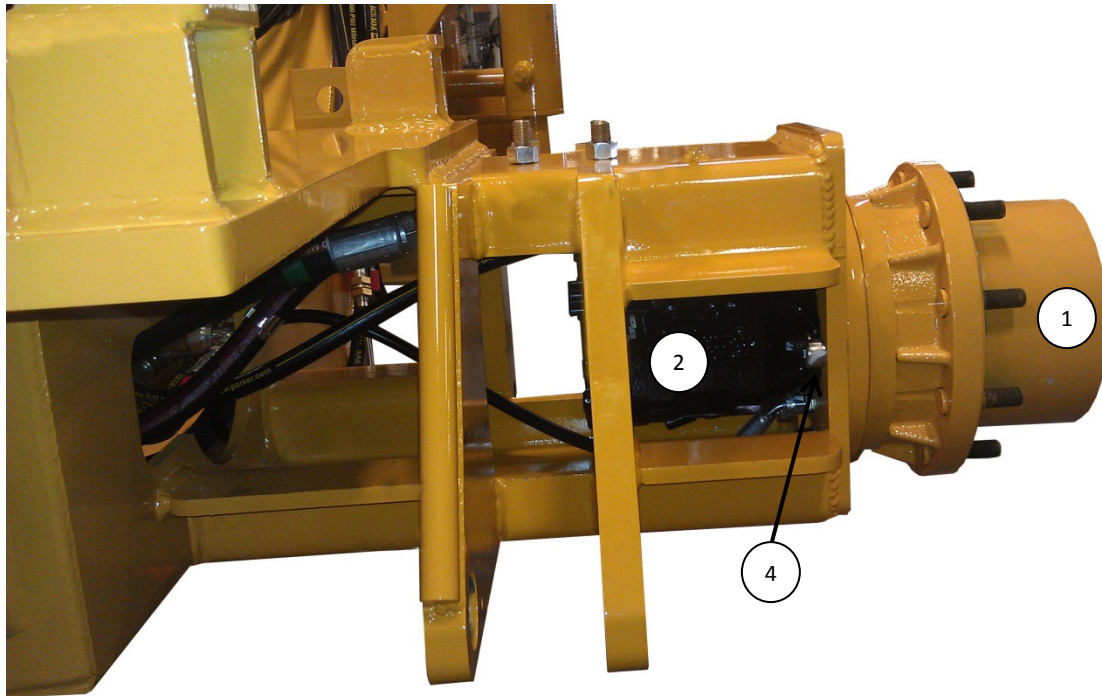
1. Seat .....	060-0049
2. Seat belt .....	275-0010
3. Air conditioning kit.....	107005
4. Heating only kit .....	108633
5. Throttle handle .....	093-0318
6. Throttle handle knob .....	050-0388
7. Safety handle .....	050-0205
8. Valve bank RH .....	108763
9. Valve bank LH.....	108764
• Valve bank seal kit .....	108763-2
10. Valve bank handle.....	108763-5
• Valve bank handle boot .....	108763-8
11. Throttle cable.....	103-107206
12. AC control knobs.....	107005-1
13. Switch rotary 3 position .....	107005-2
14. Switch 3 speed .....	107005-3
15. Heater valve .....	107005-4



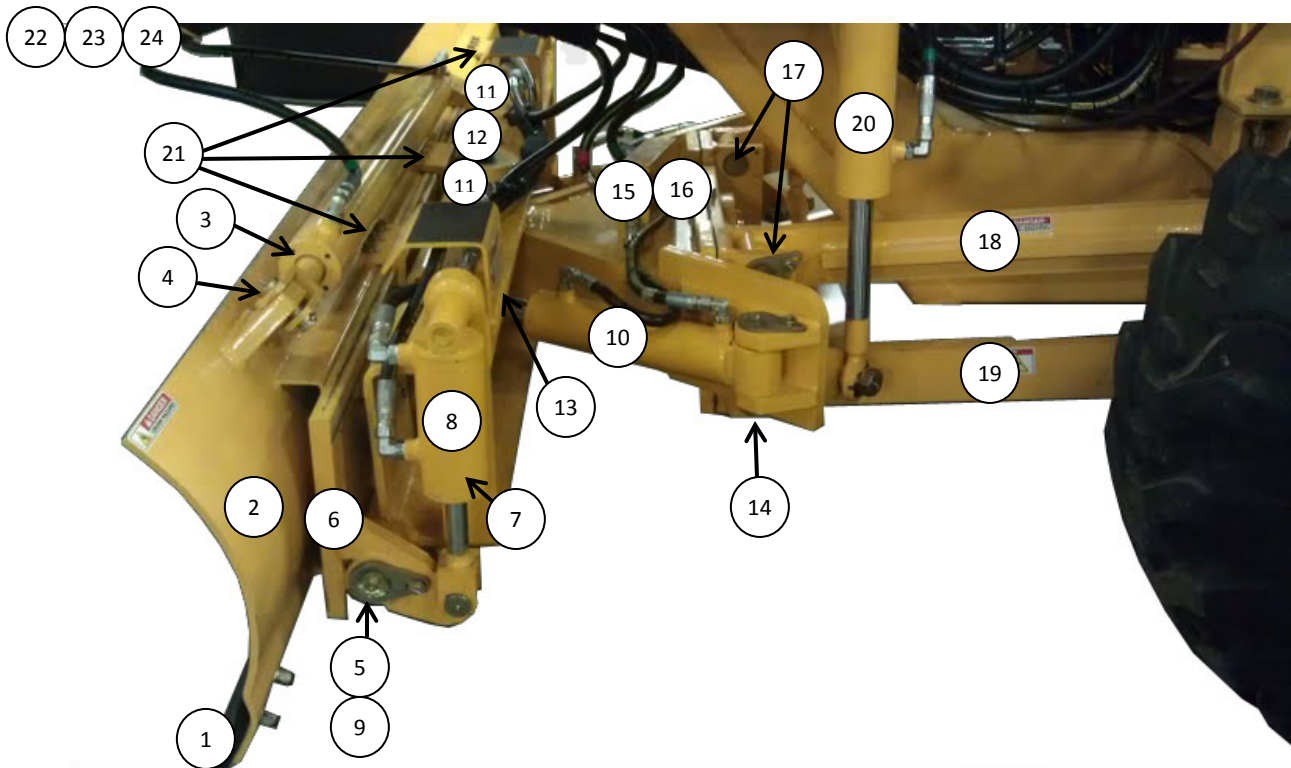


1. Front axle pivot weldment.....	102-108016
2. Axle box left hand weldment.....	102-108305
3. Axle box right hand weldment.....	102-108306
4. Spacer, axle box top (x2).....	103-298440
• Axle box top bolt (x2, 1 1/8-7 x 6.50).....	032300
5. Spacer, axle box bottom (x2).....	103-298460
• Axle box bottom bolt (x2 1 1/8-7x4.50).....	032200
6. Thrust bearing (x2) .....	028000
7. Steering cylinder.....	007601
8. Steering cylinder spacer (x2) .....	103-301340
9. Tie rod end LH.....	389600
10. Tie rod end RH.....	389601
11. Tie rod bar (26.12").....	201-108797
• Tie rod bar nut RH .....	302000
• Tie rod bar nut LH.....	302001
12. Lug nut.....	356400
13. Drive motor electric 2 speed (x2).....	013-0078
2 speed electric assembly.....	017-1015-A
Solenoid coil (not pictured).....	017-1015-C
Cartridge valve (not pictured).....	017-1015
14. Drive motor hydraulic 2 speed(not pictured) .....	013-0097
2 speed hydraulic block(not pictured).....	013-0097-2
15. Planetary (x2 no brake) .....	016-0054

16. Rim & tire assembly LH (x2 not pictured).....	108946
17. Rim & tire assembly RH (x2 not pictured).....	108947
• Rim only.....	381940
• Tire only .....	108947-T
18. Sand & turf tire rim assembly (not pictured).....	109057
19. Front axle pivot pin (2.00x9.88) .....	102-618522
• Pivot pin bolt (1"-8 x 3")	
• Bolt spacer.....	103-297275
• Brass bushing 2x2.25x3.....	047200



1. Rear planetary w/ brake .....	016-0055
2. Drive motor electric 2 speed .....	013-0078
3. Drive motor hydraulic 2 speed(not pictured) .....	013-0097
4. Socket head bolt.....	030-0532

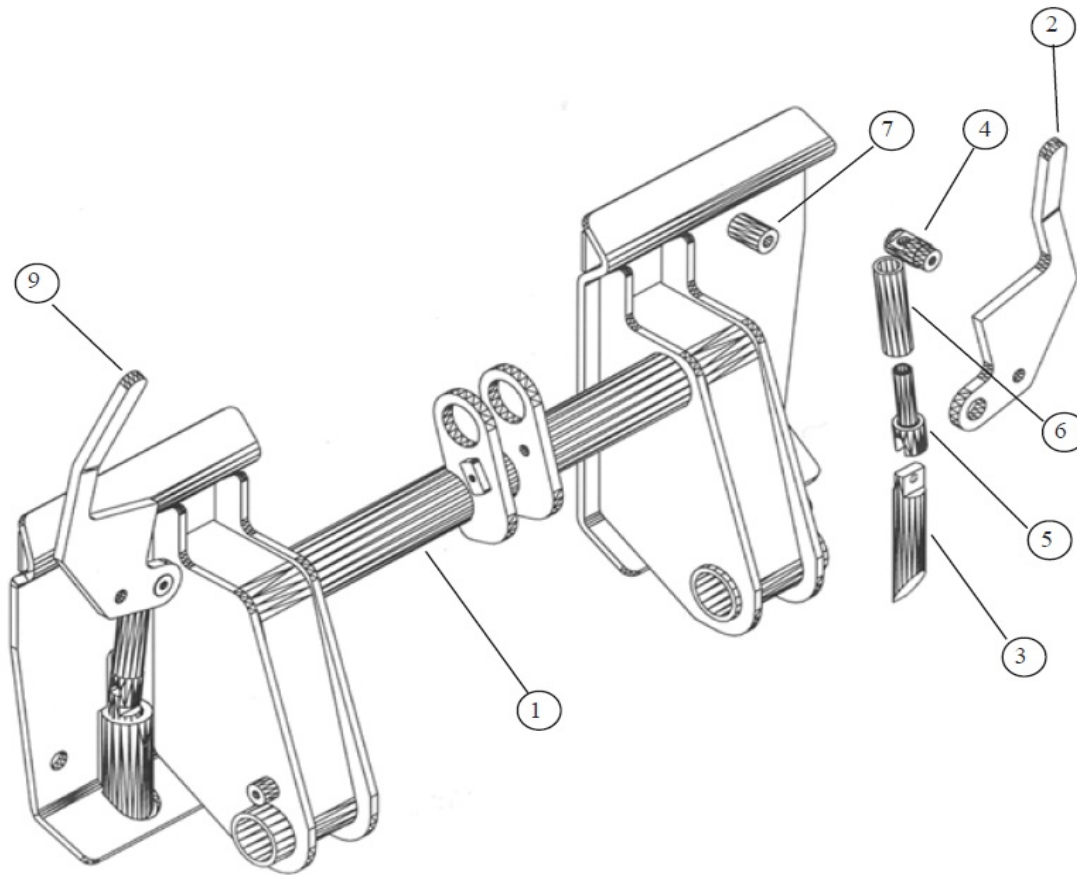


1. Cutting edge ½ x 6 x 120.....	103-276973
2. Moldboard weldment .....	108722
3. Blade shift cylinder .....	007201
4. Rod end pin (x2).....	103-108955
5. Blade tilt pin (x2).....	103-292500
• Retaining bolt w/ spacer.....	030-0531
6. Hanger slide/tilt weldment.....	102-003965
7. Clevis pin 1"x2" (x4).....	103-108955
• Cotter pin 3/16 x 2" (not pictured).....	030-0202
8. Blade tilt cylinder (x2) .....	103-104886
• Cotter pin 3/16 x 2" (not pictured).....	030-0202
9. 3" bronze bushing (x4).....	047200
10. Blade angle cylinder LH & RH (x2) .....	003700
11. Rod end pivot pin (x2) .....	102-108900
12. Hanger pivot pin 3"x15" .....	103-104941
13. Hanger pivot weldment.....	102-108346-1
14. Pin 2.00" x 5.50" w/flag (x2).....	102-108572
• Retaining bolt w/ spacer.....	030-0531
15. Hanger pivot collar (a-frame).....	102-108168
16. Push block weldment.....	102-007400
17. Front push block pin w/flag (x4).....	102-104950
• Retaining bolt w/ spacer.....	030-0531

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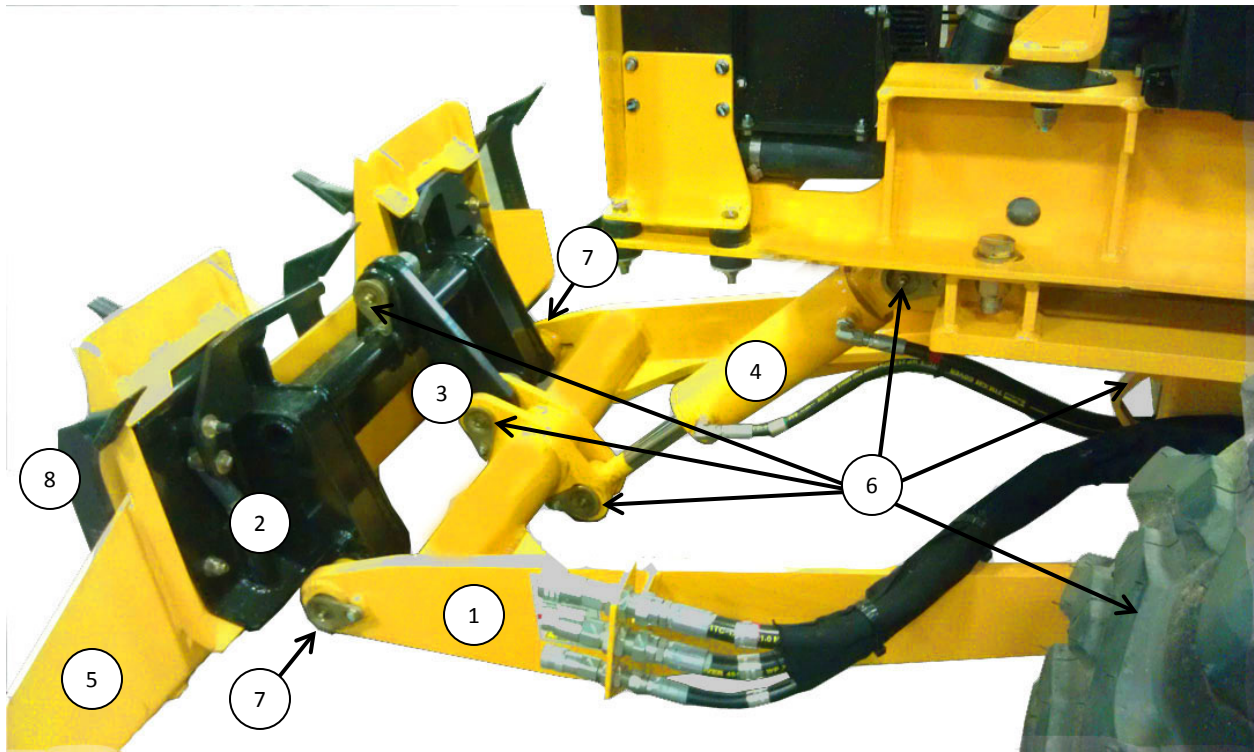
18. Upper push block radius arm weldment (x2).....	102-007450
19. Lower push block radius weldment.....	102-108275
20. Blade lift cylinder (x2) .....	006401
21. Keeper bracket (x8) .....	103-104202
22. Hose support spring bracket.....	102-208150
23. Hose support spring .....	108129
24. Hose support ring .....	103-108815

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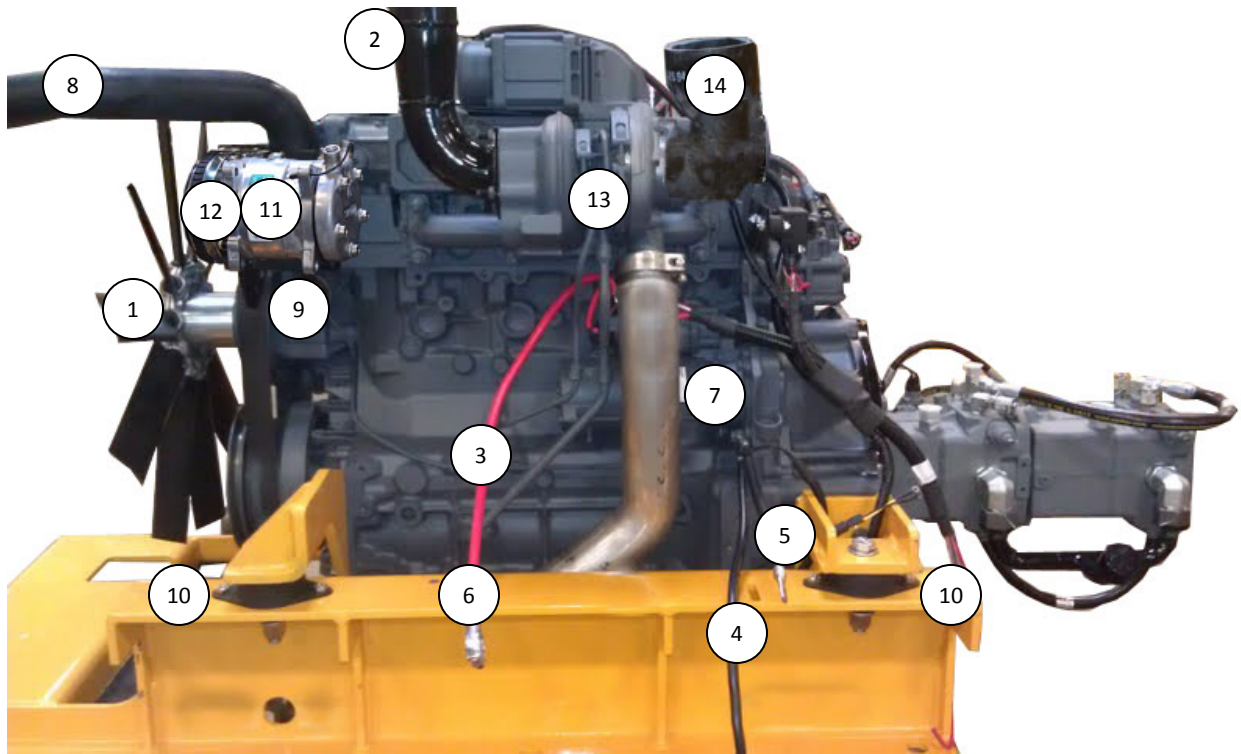
1. Quick attach weldment .....	102-108893
2. Quick attach handle RH.....	103-108603
3. Pin, latch (x2) .....	103-108604
4. Pin, latch top (x2) .....	103-108605
5. Pin, latch bottom (x2).....	103-108606
6. Spring, comp, .88IDx4.50 (x2).....	103-108607
7. Spring, comp, .62ODx1.00 (x2) .....	103-108608
8. Roll pin, .375x2.00 (x2).....	103-108609
9. Quick attach handle LH .....	103-108603-1



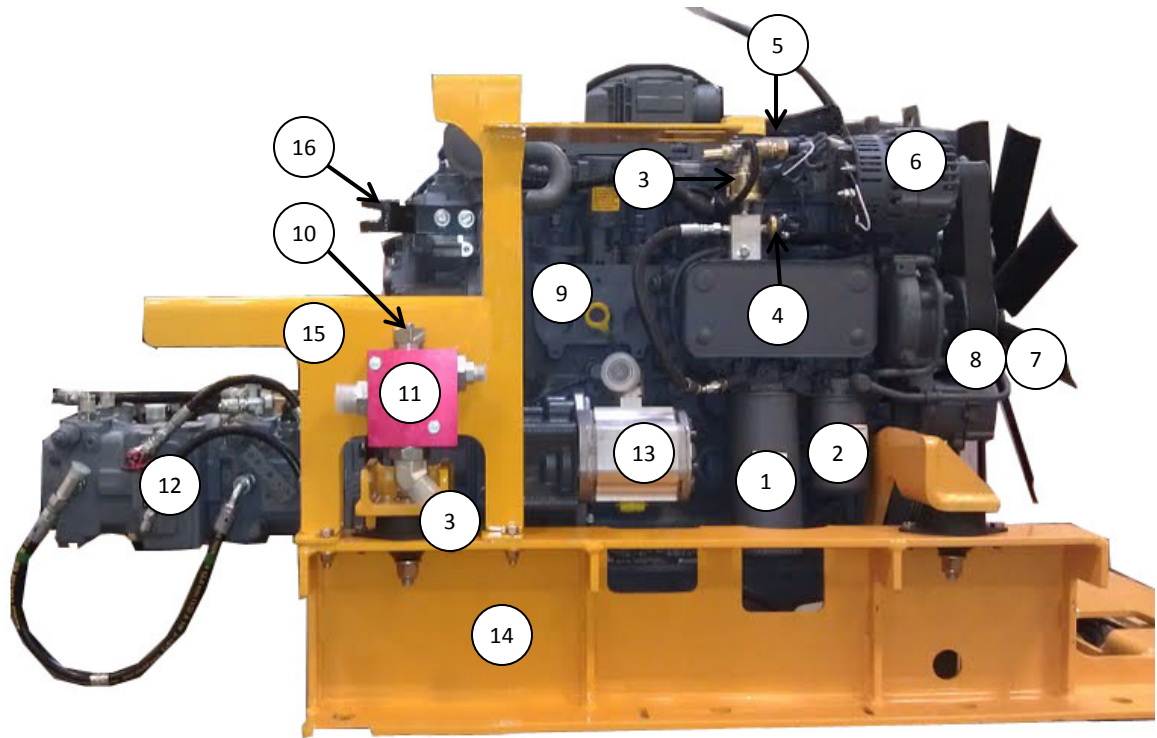


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|---|------------|
| 1. Tool bar weldment.....               | 102-108989 |
| 2. Quick attach weldment .....          | 102-108893 |
| 3. Scarifier link arm.....              | 103-107302 |
| 4. Toolbar hydraulic cylinder.....      | 008601     |
| 5. Scarifier weldment.....              | 102-106052 |
| 6. Pin, 2.00" x 5.50" w/ flag (x6)..... | 102-108572 |
| • Retaining bolt w/ spacer.....         | 030-0531   |
| 7. Pin, 2.00" x 8.50" w/ flag (x2)..... | 102-108857 |
| • Retaining bolt w/ spacer.....         | 030-0531   |
| 8. Shank with ripper tip(x7).....       | 101-104988 |

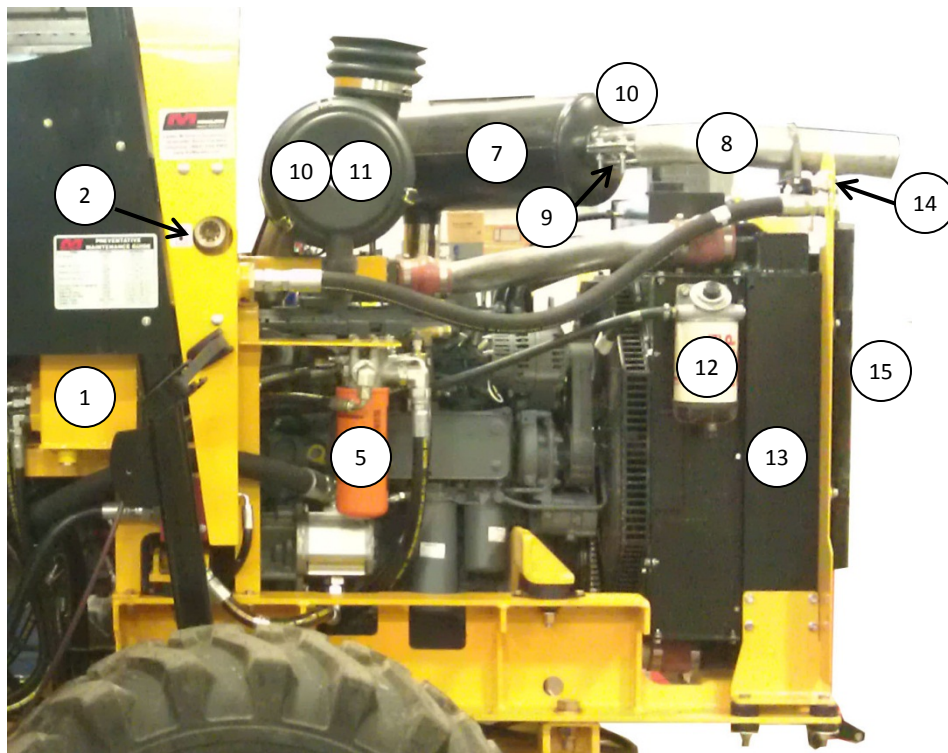




1. Fan (plastic).....	107418-1
• Fan (metal) .....	107418
2. Exhaust up pipe (turbine housing to muffler).....	102-622403-14
3. Battery cable, positive .....	020-0332
4. Battery cable, ground .....	020-0333
5. Engine ground cable.....	108918
6. Battery (not pictured).....	020-0500
7. Starter .....	010-0070
8. Radiator hose upper	
9. Radiator hose lower	
10. Engine mount rubber isolator (x4).....	107423
11. AC compressor.....	108960-01
12. AC belt .....	108960-33
13. Turbo oil feed line .....	107002-03
14. Compressor inlet rubber bellows .....	108528



1. Oil filter .....	107411
2. Fuel filter.....	107415
3. Oil pressure sender, gauge (mounted on top).....	103168
4. Oil pressure switch, light (mounted side) .....	103171
5. Coolant temperature sensor .....	103170
6. Alternator.....	107417
7. Serpentine belt tensioner.....	010-0553
8. Serpentine belt .....	107416
9. Oil dip stick.....	107002-10
10. Priority valve cartridge .....	622222
11. Priority valve body .....	622223
12. Main hydraulic pump.....	011-0251
13. Gear pump .....	108040
14. Engine cradle.....	102-622419
15. Hydraulic tank support (x2).....	102-107234
16. Throttle cable bracket .....	100-107249
17. Throttle cable adjustment lever.....	100-107250
18. Sender Temp (rear of engine).....	107435



1. Hydraulic oil tank .....	102-107227
2. Hydraulic oil tank sight gauge .....	060-0066
3. Hydraulic oil tank strainer (not pictured).....	021-0219
4. Hydraulic oil filter (not pictured).....	107216
5. Hydraulic oil charge filter.....	220750
6. Hydraulic oil tank cap (not pictured).....	060-0069
7. Muffler .....	108364-H
8. Exhaust pipe.....	109206
9. 3" exhaust band clamp.....	050-0308
10. Air filter primary.....	107412
11. Air filter secondary .....	107413
12. Pre-fuel filter w/ water separator assembly .....	107414
• Pre-fuel filter w/ water separator element .....	107438-1
13. Radiator assembly .....	622405
14. Radiator shield.....	103-107439
15. Oil cooler .....	108973